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                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
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NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental
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                 applications updated
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                 LPCI now available as a replacement to LDPCI
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                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
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                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new
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NEWS 21 APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 22 APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                 INPAFAMDB now available on STN for patent family
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                 sequence search option
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NEWS 27 JUN 13
                 USPATFULL and USPAT2 updated with 11-character
                 patent numbers for U.S. applications
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                 CAS REGISTRY includes selected substances from
                 web-based collections
NEWS 29 JUN 25
                 CA/CAplus and USPAT databases updated with IPC
                 reclassification data
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             AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.
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=> file reg

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50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\* 10208 PROJECTED ITERATIONS: 7672 TO

PROJECTED ANSWERS: 1692 TO

50 SEA SSS SAM L1

#### 10/540,993

#### => d scan

50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Adenosine, 2-amino-N-[(4-chloro-3-nitrophenyl)methyl]- (9CI) C17 H18 Cl N7 O6 IN

MF

#### Absolute stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L2

50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Adenosine, 2-bromo-N-[(4-hydroxy-2,6-dimethoxyphenyl)methyl]- (9CI) C19 H22 Br N5 O7

# Absolute stereochemistry.

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

Adenosine, N-[[4-(1,1-dimethylethyl)phenyl]methyl]-2-fluoro- (9CI) IN

C21 H26 F N5 O4 MF

10/540,993

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Adenosine, 2-amino-N-[(2,6-dihydroxy-3-methoxyphenyl)methyl]- (9CI) C18 H22 N6 O7 IN MF

Absolute stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN Adenosine, N-[(2-amino-5-chlorophenyl)methyl]-1,2-dihydro-2-oxo- (9CI) IN

C17 H19 Cl N6 O5

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Adenosine, N-[(5-fluoro-2-hydroxyphenyl)methyl]-2-methyl- (9CI)
MF C18 H20 F N5 O5

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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50 S L1

FILE 'CAPLUS' ENTERED AT 08:57:27 ON 28 JUL 2008

=> s 12

L3 5 L2

=> d bib abs

T.3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on SIN

2007:474159 CAPLUS ΑN

147:143613 DN

Preparation, biological activity and endogenous occurrence of TΙ N6-benzyladenosines

Dolezal, Karel; Popa, Igor; Hauserova, Eva; Spichal, Lukas; Chakrabarty, Kuheli; Novak, Ondrej; Krystof, Vladimir; Voller, Jiri; Holub, Jan; Strnad, Miroslav

CS Laboratory of Growth Regulators, Palacky University & Institute of Experimental Botany AS CR, Olomouc, 783 71, Czech Rep. Bioorganic & Medicinal Chemistry (2007), 15(11), 3737-3747

SO CODEN: BMECEP; ISSN: 0968-0896

PΒ Elsevier Ltd.

Journal DT

English LA

CASREACT 147:143613 O.S.

GΤ

Cytokinin activity of forty-eight 6-benzyladenosine derivs., e.g. I, at AΒ both the receptor and cellular levels as well as their anticancer

McIntosh

properties were compared in various in vitro assays. The compds. were prepared by the condensation of 6-chloropurine riboside with corresponding substituted benzylamines and characterized by standard collection of physico-chemical methods. The majority of synthesized derivs. exhibited high activity in all three of the cytokinin bioassays used (tobacco callus, wheat leaf senescence and Amaranthus bioassay). The highest activities were observed in the senescence bioassay. For several of the compds. tested, significant differences in activity were found between the bioassays used, indicating that diverse recognition systems may operate. This suggests that it may be possible to modulate particular cytokinin-dependent processes with specific compds. In contrast to their high activity in bioassays, the tested compds. were recognized with only very low sensitivity in both Arabidopsis thaliana AHK3 and AHK4 receptor assays. The prepared derivs. were also investigated for their antiproliferative properties on cancer and normal cell lines. Several of them showed very strong cytotoxic activity against various cancer cell lines. On the other hand, they were not cytotoxic for normal murine fibroblast (NIH/3T3) cell line. This anticancer activity of cytokinin ribosides may be important, given that several of them occur as endogenous compds. in different organisms.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d bib abs 2-5
    ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
     2006:796168 CAPLUS
AN
DN
     145:230849
    Preparation of nucleoside derivatives as inhibitors of El activating
     enzymes
TN
    Critchley, Stephen; Gant, Thomas G.; Langston, Steven P.; Olhava, Edward
     J.; Peluso, Stephane
     Millennium Pharmaceuticals, Inc., USA
    PCT Int. Appl., 214pp.
SO
     CODEN: PIXXD2
DТ
     Patent
LA
    English
FAN.CNT 1
                          KIND DATE
     PATENT NO.
                                               APPLICATION NO.
                                                                         DATE
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     WO 2006084281
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     AU 2006210422
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     US 20060189636
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                                                                          20060202
                                  20071031
     EP 1848718
                            A1
                                               EP 2006-734691
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IN 2007-DN6144

20070807

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IN 2007DN06144

WO 2006-US4637

MARPAT 145:230849

PRAI US 2005-650433P

Nucleoside derivs. I, wherein A is substituted purine derivs.; X is CH2, CHF, CF2, NH, O; Y is O, S, substituted carbon; each R is independently H, F, aliphatic, fluoro-aliphatic; two R, taken together with the carbon atom to which they are attached, form a 3- to 6-membered carbocyclic ring; or one R, taken together with R1 and the intervening carbon atoms, forms a 3- to 6-membered spiro-cyclic ring; or two R together form O; R1 is H, or aliphatic; R and R1 taken together with the intervening carbon atoms form a 3- to 6-membered spiro-cyclic ring; R2 and R5 are independently is H , F , CN, N3, OH, alkoxy, substituted hydrazine, carbamate, amide, acyl, oxy-amide, ester, oxy-carboxylate, fluoro-aliphatic, aliphatic; R3 is H , F aliphatic, fluoro-aliphatic; R4 is H, F, aliphatic, fluoro-aliphatic; R6 is H, aliphatic; n is 1-3; were prepared as inhibitors of E1 activating enzymes and useful for treating disorders, particularly cell proliferation disorders, including cancers, inflammatory and neurodegenerative disorders; and inflammation associated with infection and cachexia. Thus, [(2R,3S,4R,5R)-5-[6-((1S)-2,3-dihydro-1H-inden-1-ylamino)-9H-purin-9-yl]-3,4-dihydroxytetrahydrofuran-2-yl]methyl sulfamate was prepared and tested in vitro and in mice as inhibitor of El activating enzyme. The compds. are designed to be inhibitors of Nedd8-activating enzyme (APPBP1-Uba3) (NAE), ubiquitin activating enzyme (UAE), and/or activating enzyme (Aosl-Uba2) (SAE).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2004:634314 CAPLUS
- DN 141:296236
- TI 2-Pyrazolyl-N6-Substituted Adenosine Derivatives as High Affinity and Selective Adenosine A3 Receptor Agonists
- AU Elzein, Elfatih; Palle, Venkata; Wu, Yuzhi; Maa, Tenning; Zeng, Dewan; Zablocki, Jeff
- CS Department of Bioorganic Chemistry and Department of Drug Research and Pharmacological Sciences, CV Therapeutics Inc., Palo Alto, CA, 94304, USA
- SO Journal of Medicinal Chemistry (2004), 47(19), 4766-4773 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 141:296236
- AB The authors describe the synthesis of new high affinity and selective A3-adenosine receptor (A3-AdoR) agonists. Introduction of a Me group at the N6-position of the A2A-AdoR selective 2-pyrazolyl-adenosine analogs (Figure 2) brought about a substantial increase in the A3-AdoR binding affinity and selectivity. While the N6-desmethyl analogs were inactive at the A3-AdoR (Ki > 10 μM), the corresponding N6-Me analogs showed good binding affinity at the A3-AdoR (Ki = 73 and 97 nM, resp.). Replacement of the carboxamide group with different heteroaryl groups resulted in analogs with high affinities and selectivity for the A3-AdoR. (2R,3S,4R)-Tetrahydro-2-(hydroxymethyl)-5-(6-(methylamino)-2-(4-(pyridin-2-yl)-1H-pyrazol-1-yl)-9H-purin-9-yl)furan-3,4-diol (Ki = 2 nM) displayed high selectivity for the A3-AdoR vs. A1- and A2A-AdoRs (selectivity ratios of 1900 and >2000, resp.).

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on SIN
- AN 2004:566634 CAPLUS
- DN 141:123865
- TI Substitution derivatives of N6-benzyl-adenosine, methods of their preparation, their use for preparation of drugs, cosmetic preparations and growth regulators, pharmaceutical preparations, cosmetic preparations and growth regulators containing these compounds
- IN Dolezal, Karel; Popa, Igor; Zatloukal, Marek; Lenobel, Rene; Hradecka, Dana; Vojtesek, Borivoj; Uldrijan, Stjepan; Mlejnek, Petr; Werbrouck,

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Stefaan; Strnad, Miroslav
     Ustav Experimentalni Botaniky Akademie Ved Ceske Republiky, Czech Rep.; et
PΑ
     al.
SO
     PCT Int. Appl., 114 pp.
     CODEN: PIXXD2
DТ
     Patent
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     English
FAN.CNT 1
                                                                              DATE
     PATENT NO.
                            KIND
                                     DATE
                                                   APPLICATION NO.
     WO 2004058791
                             A2
                                     20040715
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                                                                              20031229
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     WO 2004058791
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               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
               PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
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                                                                              20031229
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     ZA 2005006074
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                                     20060727
                                                   US 2005-540993
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PRAI CZ 2002-4273
                                     20021230
                              Α
     WO 2003-CZ78
                              W
                                     20031229
     MARPAT 141:123865
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The invention concerns novel substitution derivs. of N6-benzyl-adenosine AB I, wherein n is 2-6; R1 is H, OH, halogen, alkoxy, amino, hydrazo, mercapto, methylmercapto, carboxyl, cyano, nitro, amido, sulfo, sulfamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, carbylalkoxy, cycloalkyl, carbamoyl alkyl; R2 is H, OH, halogen, alkoxy, amino, hydrazo, mercapto, methylmercapto, carboxyl, cyano, nitro, amido, sulfo, sulfamido, acylamino, acyloxy, alkylamino, dialkylamino, alkylmercapto, cabylalkoxy, cycloalkyl, carbamoyl, having anticancer, mitotic, immunosuppressive and anti-senescent properties for plant, animal and human cells. This invention also relates to the methods of preparation of these N6-benzyl-adenosine derivs. and their use as drugs, cosmetic prepns. and growth regulators comprising these derivs. as active compound and use of these derivs. for preparation of pharmaceutical compns., in biotechnol. processes, in cosmetics and in agriculture. Use of title compds. as mitotic or antimitotic compound, especially for treating cancer, psoriasis, rheumatoid arthritis, lupus, type I diabetes, multiple sclerosis, restenosis, polycystic kidney disease, graft rejection, graft vs. host disease and gout, parasitoses such as those caused by fungi or protists, or Alzheimer's disease, or as anti-neurogenerative drugs, or to suppress

immunostimulation or for the treatment of proliferative skin diseases. Thus, 2-amino-6-(2-methoxybenzylamino)purine riboside was prepared as growth regulator, and antitumor agent.

- L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2004:406956 CAPLUS
- DN 141:235647
- TI Modulation of adenosine receptor affinity and intrinsic efficacy in adenine nucleosides substituted at the 2-position
- AU Ohno, Michihiro; Gao, Zhan-Guo; Van Rompaey, Philippe; Tchilibon, Susanna; Kim, Soo-Kyung; Harris, Brian A.; Gross, Ariel S.; Duong, Heng T.; Van Calenbergh, Serge; Jacobson, Kenneth A.
- CS National Institute of Diabetes and Digestive and Kidney Diseases, DHHS, Laboratory of Bioorganic Chemistry, Molecular Recognition Section, National Institutes of Health (NIH), Bethesda, MD, 20892-0810, USA
- SO Bioorganic & Medicinal Chemistry (2004), 12(11), 2995-3007 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier Ltd.
- DT Journal
- LA English
- OS CASREACT 141:235647
- AB We studied the structural determinants of binding affinity and efficacy of adenosine receptor (AR) agonists. Substituents at the 2-position of adenosine were combined with N6-substitutions known to enhance human A3AR affinity. Selectivity of binding of the analogs and their functional effects on cAMP production were studied using recombinant human A1, A2A, A2B, and A3ARs. Mainly sterically small substituents at the 2-position modulated both the affinity and intrinsic efficacy at all subtypes. The 2-cyano group decreased hA3AR affinity and efficacy in the cases of N6-(3-iodobenzyl) and N6-(trans-2-phenyl-1-cyclopropyl), for which a full A3AR agonist was converted into a selective antagonist; the 2-cyano-N6-Me analog was a full A3AR agonist. The combination of N6-benzyl and various 2-substitutions (chloro, trifluoromethyl, and cyano) resulted in reduced efficacy at the A1AR. The environment surrounding the 2-position within the putative A3AR binding site was explored using rhodopsin-based homol. modeling and ligand docking.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL SEARCH INITIATED 08:58:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8425 TO ITERATE

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2343 ANSWERS

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=> s 14

L5 233 L4

=> d bib abs hitstr 200-233 15

- L5 ANSWER 200 OF 233 CAPLUS COPYRIGHT 2008 ACS on SIN
- AN 1979:68647 CAPLUS
- DN 90:68647
- OREF 90:10827a,10830a
- TI High performance liquid chromatographic analysis of cytokinins in Sorghum bicolor leaves
- AU Kannangara, T.; Durley, R. C.; Simpson, G. M.
- CS Crop Sci. Dep., Univ. Saskatchewan, Saskatoon, SK, Can. SO Physiologia Plantarum (1978), 44(3), 295-9
- CODEN: PHPLAI; ISSN: 0031-9317
- DT Journal
- LA English
- AB High-performance liquid chromatog. with octadecylsilica (Bondapak C18/Poracil B) column packing was used to purify and sep. cytokinins in sorghum leaf exts. The column size was 56 + 0.21 cm. By gradient elution with acidified water containing increasing amts. of MeOH, the major peaks of cytokinin activity, as determined by the callus tissue bioassay, were effectively separated from large amts. of extraneous impurities. These cytokinins were separated further on a microoctadecylsilica column (μBondapak C18, 30 + 0.4 cm) with a gradient of acidified water-acetonitrile. Zeatin and zeatin riboside gave distinct UV absorption peaks, which could be used for quant. estimation Biol. activity

Absolute stereochemistry.

L5 ANSWER 201 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1978:420376 CAPLUS
DN 89:20376
OREF 89:3187a,3190a
TI Influence of different cytokinins on the transpiration and senescence of

excised oat leaves

AU Biddington, N. L.; Thomas, T. H. CS Natl. Veg. Res. Stn., Wellesbourne/Warwick, UK

SO Physiologia Plantarum (1978), 42(4), 369-74 CODEN: PHPLAI; ISSN: 0031-9317

DT Journal

LA English

AΒ To investigate the possibility that cytokinins control transpiration indirectly through affecting leaf senescence, a direct comparison was made of the effect of different cytokinins on transpiration and senescence of 4at leaves. Senescence was assessed by measuring chlorophyll loss. The synthetic cytokinins N6-benzyladenine (I) and kinetin delayed senescence and increased transpiration of oat leaves to a greater extent than did the naturally occurring compds. zeatin,  $N6-\Delta 2$ -isopentenyladenine (i6Ade) and 6-o-hydroxybenzyladenosine (II). During th early stages of the transpiration experiment zeatin showed similar or greater activity than I. This period was longest when freshly excised leaves were used, was reduced when leaves were used after incubation in distilled water in the dark for 20 h and was eliminated by incubation in cytokinin solution in the dark. After this period the activity of zeatin declined relative to I. The effect of cytokinins in increasing transpiration occurred only in the light; no effect was observed in the dark. I showed higher activity than zeatin in senescence tests but both cytokinins were less effective as the tests progressed, this decrease in activity being more rapid when older leaves were used. The results are discussed in relation to the mechanisms by which endogenous cytokinins might control senescence and transpiration in oat leaves and to the value of the oat leaf senescence and transpiration bioassays as tests for cytokinin activity of plant exts.

IT 50868-58-1

RL: BIOL (Biological study)

(senescence and transpiration in excised oat leaves response to)

RN 50868-58-1 CAPLUS

CN Adenosine, N-[(2-hydroxyphenyl)methyl]- (CA INDEX NAME)

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ANSWER 202 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
ΑN
             1978:51117 CAPLUS
             88:51117
DN
OREF 88:8081a,8084a
             Synthesis of N6- or 8-substituted 9-(\beta-D-arabinofuranosyl)adenines
             and their antiviral activities against herpes simplex and vaccinia viruses
ΑU
             Kaneko, Masakatsu; Kimura, Misako; Nishimura, Takuzo; Shimizu, Bunji
CS
             Cent. Res. Lab., Sankyo Co., Ltd., Tokyo, Japan
SO
             Chemical & Pharmaceutical Bulletin (1977), 25(10), 2482-9
             CODEN: CPBTAL; ISSN: 0009-2363
DT
             Journal
LA
             English
AB
             9-(\beta-D-Arabinofuranosyl) adenine (Ara-A) was prepared from AMP in 30%
             yield via 8,2'-O-cycloadenosine. 8-Substituted-amino Ara-A derivs. were
            obtained by aminolysis of 8,2'-O-cycloadenosine; N6-substituted Ara-A
             derivs. were obtained by treating 6-chloro-9-(\beta-D-
             arabinofuranosyl) purine with amines. In vitro antiviral activities of the
             N6- or 8-substituted Ara-A were determined by the degree of cytopathic effect
             inhibition.
            65397-90-2P 65397-91-3P 65397-92-4P
             65397-93-5P 65397-94-6P 65397-95-7P
             65397-96-8P 65397-97-9P
             RL: BAC (Biological activity or effector, except adverse); BSU (Biological
             study, unclassified); SPN (Synthetic preparation); BIOL (Biological
             study); PREP (Preparation)
                     (preparation and virucidal activity of)
             65397-90-2 CAPLUS
RN
             9 + Purin - 6 - amine, \quad 9 - \beta - D - arabinofuranosyl - N - [(2 - methylphenyl)methyl] - Purin - 6 - amine, \quad 9 - \beta - D - arabinofuranosyl - N - [(2 - methylphenyl)methyl] - Purin - 6 - amine, \quad 9 - \beta - D - arabinofuranosyl - N - [(2 - methylphenyl)methyl] - Purin - 6 - amine, \quad 9 - \beta - D - arabinofuranosyl - N - [(2 - methylphenyl)methyl] - Purin - (2 - methylphenyl)methyll] - (2 - methylphenyl)methyll] - (2 - methylphenyl)methyll] - (2 - methylphenyl)methyll] 
CN
             (CA INDEX NAME)
```

RN 65397-91-3 CAPLUS 
CN 9H-Purin-6-amine,  $9-\beta$ -D-arabinofuranosyl-N-[(3-methylphenyl)methyl]-

(CA INDEX NAME)

Absolute stereochemistry.

65397-92-4 CAPLUS RN

 ${\tt 9H-Purin-6-amine, 9-\beta-D-arabinofuranosyl-N-[(4-methylphenyl)methyl]-1}$ (CA INDEX NAME)

Absolute stereochemistry.

RN

65397-93-5 CAPLUS 9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-N-[(2,3-dimethylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

65397-94-6 CAPLUS 9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-N-[(2,4dimethylphenyl) methyl] - (CA INDEX NAME)

Absolute stereochemistry.

RN

65397-95-7 CAPLUS 9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-N-[(2,5-dimethylphenyl)methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

65397-96-8 CAPLUS

9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-N-[(2,6-dimethylphenyl)methyl]- (CA INDEX NAME)

65397-97-9 CAPLUS RN

9H-Purin-6-amine, 9- $\beta$ -D-arabinofuranosyl-N-[(3,4dimethylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 203 OF 233 CAPLUS COPYRIGHT 2008 ACS on SIN

AN 1978:17157 CAPLUS

DN 88:17157

OREF 88:2715a,2718a

Antisenescent activity of natural cytokinins ΤI

Kuhnle, Judith A.; Fuller, Glenn; Corse, Joseph; Mackey, Bruce E. WRRC, ARS, Berkeley, CA, USA Physiologia Plantarum (1977), 41(1), 14-21 CODEN: PHPLAI; ISSN: 0031-9317

CS

SO

DT Journal

LA English

GΙ

The antisenescent activity of naturally occurring cytokinins (bases and ribosides) were evaluated by measuring chlorophyll retention in detached AB wheat (Triticum vulgare) leaf segments. 6-(3-Methyl-2-butenylamino)-2-

methylthiopurine (I) [20758-33-2] was the most active cytokinin followed by 6-(4-hydroxy-3-methyl-trans-2-butenylamino)purine (II) [1637-39-4]. Other D-ribofuranosylpurines tested were essentially inactive. 9-Ribosyl substitution did not affect the activity of II,  $(\pm)-6-(4-\text{hydroxy}-3-\text{hydroxy}-3-\text{hydroxy})$ methylbutylamino)purine (III) [14894-18-9], or 6-(3-methyl-2-mbutenylamino) purine (IV) [2365-40-4], but lowered the activity of 6-(o-hydroxybenzylamino)purine [20366-83-0] and 6-(4-hydroxy-3-methyl-cis-2-butenylamino)purine [32771-64-5]. 2-Methylthio substitution increased the activity of III and IV and decreased or had no effect on the activity of other derivs. The activities of the simultaneously substituted 2-methylthio-9-ribosyl compds. are lower than those of their corresponding unsubstituted or 2-methylthio substituted bases with the exception of III. Structure-activity relations for chlorophyll retention did not parallel many of the relation found for callus tissue growth stimulation.

ΤТ 50868-58-1

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antisenescent activity of)

50868-58-1 CAPLUS RN

Adenosine, N-[(2-hydroxyphenyl)methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

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ANSWER 204 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
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ΑN 1977:536321 CAPLUS

87:136321

OREF 87:21613a,21616a

Purine nucleotides TΙ

ΤN Imahori, Kazutomo; Suzuki, Koichi; Eguchi, Chikahiko

Ajinomoto Co., Inc., Japan PΑ

Jpn. Kokai Tokkyo Koho, 8 pp. SO

INDEX NAME)

LA	CODEN: JKXXAF Patent Japanese CNT 1								
		KIND	DATE	APPLICATION NO.	DATE				
PI			19770225 19851021	JP 1975-102293	19750823				
PRAI	JP 1975-102293	A	19750823						
AB	Aminophenylpurine nucleotides, ligands for carriers for affinity								
	3 ,	the corresponding ni							
nucleotides. Thus, 500mg Na N6-(p-nitrobenzyl)-5'-adenylate in MeOH-									
	was hydrogenated at atmospheric pressure using 5% Pd-C to give 387m N6-(p-aminobenzyl)-5'-adenylate. Similarly prepared was Na salt of								
	p-aminophenyl adenosine-5'-phosphate.								
ΙT	63459-71-2								
	RL: RCT (Reactant);	eant); RACI (Reactant or reagent)							
	(hydrogenation of)								
RN	63459-71-2 CAPLUS								
CN	5'-Adenylic acid, N	I-[(4-n:	itrophenyl)m	ethyl]-, monosodium s	alt (9CI) (CA				

ΤТ 63425-98-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

63425-98-9 CAPLUS

5'-Adenylic acid, N-[(4-aminophenyl)methyl]-, monosodium salt (9CI) (CA INDEX NAME)

- ANSWER 205 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN L5
- AN 1977:449435 CAPLUS
- DN 87:49435
- OREF 87:7823a,7826a
- Synthesis of AMP analogs and their use for studies on the allosteric site ΤI of rabbit muscle glycogen phosphorylase b
- Eguchi, Chikahiko; Suzuki, Koichi; Imahori, Kazutomo Fac. Med., Univ. Tokyo, Tokyo, Japan ΑU
- CS
- Journal of Biochemistry (Tokyo, Japan) (1977), 81(5), 1401-11 CODEN: JOBIAO; ISSN: 0021-924X SO
- DT Journal
- LA English
- AΒ In order to obtain a better understanding of the allosteric site of rabbit muscle phosphorylase b (I), 9 AMP analogs having a bulky hydrophobic benzene ring were synthesized and tested for activity as effectors. N6-Benzyl-AMP derivs. activated I to the same extent as AMP but were bound to I more tightly than AMP. N6-p-nitrobenzyl-AMP had the highest affinity for the AMP site. In an attempt to irreversibly modify the allosteric site of I, N6-p-bromoacetaminobenzyl-AMP (II) was synthesized. I was

maximally activated upon incorporation of 1.0 mol of II/I subunit, and its activity was .apprx.90% of that of native I measured in the presence of AMP. The modified I showed characteristics (e.g., kinetic parameters, stability, solubility, inhibition by glucose 6-phosphate, and state of aggregation) quite similar to those observed for native I in the presence of AMP. These results indicate that the AMP site of I was specifically labeled by II. The nature of the allosteric site of I is discussed based on the results obtained.

IT 40297-54-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

(preparation of) RN 40297-54-9 CAPLUS

CN Adenosine, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 63074-11-3P 63554-91-6P 63554-92-7P

63591-33-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of and phosphorylase b response to)

63074-11-3 CAPLUS

CN 5'-Adenylic acid, N-[[4-[(bromoacetyl)amino]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 63554-91-6 CAPLUS

CN 5'-Adenylic acid, N-[(4-aminophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 63554-92-7 CAPLUS
CN 5'-Adenylic acid, N-[[4-(acetylamino)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 63591-33-3 CAPLUS
CN 5'-Adenylic acid, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

```
L5
     ANSWER 206 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1977:449434 CAPLUS
AN
DN
     87:49434
OREF 87:7823a,7826a
    Affinity labeling of adenine nucleotide-related enzymes with reactive
TΙ
     adenine nucleotide analogs. II. Affinity labeling of phosphoglycerate
     kinase with a reactive AMP analog
ΑU
     Suzuki, Koichi; Eguchi, Chikahiko; Imahori, Kazutomo
     Fac. Med., Univ. Tokyo, Tokyo, Japan
Journal of Biochemistry (Tokyo, Japan) (1977), 81(5), 1393-9
CODEN: JOBIAO; ISSN: 0021-924X
CS
SO
DT
     Journal
LA
    English
    Affinity labeling of yeast and Bacillus stearothermophilus
AB
     phosphoglycerate kinases (I) with a reactive AMP analog,
     N6-(p-bromoacetaminobenzyl)-AMP (II), was examined Complete loss of I activity was observed when 1 mol of II had reacted per mol of either I.
     Results on the effect of pH and substrate addition on the inactivation,
     titration of SH groups before and after modification, and kinetic studies
     with AMP analogs suggest that the modification occurs at 1 NH2 group at or
     near the substrate binding site. General affinity labeling of kinases is
     discussed.
     63074-11-3
     RL: BIOL (Biological study)
         (phosphoglycerate kinase affinity labeling with)
     63074-11-3 CAPLUS
RN
     5'-Adenylic acid, N-[[4-[(bromoacetyl)amino]phenyl]methyl]- (9CI) (CA
     INDEX NAME)
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ANSWER 207 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
      1977:401722 CAPLUS
AN
DN
      87:1722
OREF 87:307a,310a
     Affinity labeling of adenine nucleotide-related enzymes with reactive
TI
      adenine nucleotide analogs. I. Affinity labeling of glyceraldehyde 3-phosphate dehydrogenase and myokinase with a reactive AMP analog
     Suzuki, Koichi; Eguchi, Chikahiko; Imahori, Kazutomo
Fac. Med., Univ. Tokyo, Tokyo, Japan
Journal of Biochemistry (Tokyo, Japan) (1977), 81(4), 1147-54
CODEN: JOBIAO; ISSN: 0021-924X
ΑU
CS
SO
DT
     Journal
     English
LA
     Rabbit muscle glyceraldehyde 3-phosphate dehydrogenase (GPD) and myokinase
      (MK) were rapidly inactivated by N6-(p-bromoacetaminobenzyl)-AMP under
      mild conditions. Complete inactivation was observed when 4 and 0.3 mol of
      the reagent with respect to enzyme were reacted with GPD and MK, resp.
      The inactivation of both enzymes was favored at higher pH and the enzymes
      were protected by addition of adenine nucleotide substrate. Modified GPD or
      MK had no affinity for AMP-Sepharose, in contrast to the native enzymes.
      Thus, the inactivation of GPD and MK by the reactive AMP analog can be
      regarded as an affinity labeling.
ΙT
      63074-11-3
      RL: BIOL (Biological study)
         (glyceraldehyde phosphate dehydrogenase and myokinase affinity labeling
         by)
     63074-11-3 CAPLUS
RN
CN
      5'-Adenylic acid, N-[[4-[(bromoacetyl)amino]phenyl]methyl]- (9CI) (CA
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INDEX NAME)

ANSWER 208 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN

1977:121709 CAPLUS AN

86:121709 DN

OREF 86:19231a,19234a

Adenosine derivatives TΙ

IN Kampe, Wolfgang; Thiel, Max; Stach, Kurt; Schaumann, Wolfgang; Dietmann, Karl

PΑ

Boehringer Mannheim G.m.b.H., Fed. Rep. Ger. Ger. Offen., 13 pp. Addn. to and Division of Ger. Offen. 1,670,175.

CODEN: GWXXBX

Patent DT

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
F	PI DE 2524284	A1	19761028	DE 1975-2524284	19750417
F	PRAI DE 1975-2524284	A	19750417		
G	FI				

Vasodilating adenosines I (R = H; R1 = C1, OH; R2 = 2-F3CC6H4CH2NH; R = H, AΒ R1 = OH, R2 = 2-Me-5-ClC6H3CH2NH) were prepared in 29-39% yields. Thus, I (R = Ac, R1 = R2 = C1), 2-F3CC6H4CH2NH2, and Et3N in Me2CHOH were refluxed 2 h to give 39% I (R = H, R1 = C1, R2 = 2-F3CC6H4CH2NH) (II), which gave 6% decrease in the exhaustion of O in arterial blood.

62190-54-9P 62190-55-0P 62223-39-6P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and vasodilating activity of)

RN 62190-54-9 CAPLUS

Adenosine, 2-chloro-N-[[2-(trifluoromethyl)phenyl]methyl]- (9CI) (CA CN

INDEX NAME)

Absolute stereochemistry.

RN 62190-55-0 CAPLUS
CN Adenosine, 1,2-dihydro-2-oxo-N-[[2-(trifluoromethyl)phenyl]methyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 62223-39-6 CAPLUS CN Adenosine, N-[(5-chloro-2-methylphenyl)methyl]-1,2-dihydro-2-oxo- (9CI) (CA INDEX NAME)

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ANSWER 209 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1975:572423 CAPLUS
AN
DN
     83:172423
OREF 83:27001a,27004a
     Inhibitors of nucleoside transport. Structure-activity study using human
ΤI
     erythrocytes
ΑIJ
    Paul, Brajeswar; Chen, Marianne F.; Paterson, Alan R. P.
CS
    McEachern Lab., Univ. Alberta, Edmonton, AB, Can.
     Journal of Medicinal Chemistry (1975), 18(10), 968-73
     CODEN: JMCMAR; ISSN: 0022-2623
DT
     Journal
LA
     English
     For diagram(s), see printed CA Issue.
GΙ
    Of 68 nucleoside derivs. studied, the 9-\beta-D-ribofuranosylpurine [550-33-4] derivs. with S, O, or N atoms at the 6 position bearing alkyl
     or aralkyl groups most strongly inhibited transport of hypoxanthine
     [68-94-0] and guanosine [118-00-3] across the erythrocyte plasma membrane.
     6-[(2-Hydroxy-5-nitrobenzyl)thio]-9-\beta-D-ribofuranosylpurine (I)
     [56964-73-9] and 2-amino-6-[(2-hydroxy-5-nitrobenzyl)thio]-9-\beta-D-
     ribofuranosylpurine (II) [41094-07-9] were very potent inhibitors, giving
     50% inhibition of extracellular hypoxanthine and guanosine conversion to
     inosine in erythrocytes at concns. of 6.9 + 10-5 and 5.8 +
     10-6mM, resp. The relation of structure and substituent hydrophobicity to
     activity is discussed.
     40297-54-9P 56964-69-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and nucleoside transport inhibition by)
RN
     40297-54-9 CAPLUS
   Adenosine, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)
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RN 56964-69-3 CAPLUS

CN Adenosine, N-methyl-N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

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T<sub>1</sub>5
     ANSWER 210 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1975:557754 CAPLUS
AN
     83:157754
DN
OREF 83:24691a,24694a
     Synthesis and biological activities of some N6-(nitro- and
     -aminobenzyl)adenosines
     Dutta, Shib P.; Tritsch, George L.; Cox, Clifford; Chheda, Girish B. Gen. Clin. Res. Cent., Roswell Park Mem. Inst., Buffalo, NY, USA
ΑU
CS
SO
     Journal of Medicinal Chemistry (1975), 18(8), 780-3
     CODEN: JMCMAR; ISSN: 0022-2623
DT
     Journal
LA
    English
GI
     For diagram(s), see printed CA Issue.
    Of 12 title compds., prepared by direct alkylation of adenosine [58-61-7] by
     a benzyl bromide derivative to give the N1-derivative followed by rearrangement in
     base, or nucleophilic displacement of Cl in 6-chloropurine nucleosides
     with an amine, several were inhibitors of adenosine aminohydrolase
     [9026-93-1] and equal to or more active than N6-benzyladenosine
     [4294-16-0] as growth inhibitors of leukemia L1210 cells. The highest
     affinity for the substrate binding site of the enzyme was shown by
     N6-p-nitrobenzyladenosine (I) [40297-54-9] and
     N6-p-nitrobenzyl-2'-deoxyadenosine (II) [56527-33-4], which were also
     relatively nontoxic. 2-Amino-6-p-nitrobenzylamino-9-(\beta-D-ribofuranosyl)purine (III) [56527-38-9] and 2-amino-6-p-
     nitrobenzylaminopurine (IV) [56527-39-0] were better inhibitors of L1210
     cells than N6-benzyladenosine.
     40297-54-9P 40896-40-0P 40896-43-3P
     40958-96-1P 56527-34-5P 56527-35-6P
     56527-36-7P 56527-38-9P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation)
         (preparation and biol. activity of)
     40297-54-9 CAPLUS
    Adenosine, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)
CN
```

RN 40896-40-0 CAPLUS
CN Adenosine, N-[(2-nitrophenyl)methyl]- (CA INDEX NAME)

10/540,993

40896-43-3 CAPLUS RN

Adenosine, N-[(2-methoxy-5-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

RN

40958-96-1 CAPLUS Adenosine, N-[(3-nitrophenyl)methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

56527-34-5 CAPLUS RN

Adenosine, N-[(4-aminophenyl)methyl]-, monohydrochloride (9CI) (CA INDEX  ${\tt CN}$ 

10/540,993

RN 56527-35-6 CAPLUS
CN Adenosine, N-[[4-(acetylamino)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 56527-36-7 CAPLUS
CN Adenosine, N-[(4-fluorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

RN 56527-38-9 CAPLUS
CN Adenosine, 2-amino-N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 211 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN L5 ΑN 1975:510724 CAPLUS 83:110724 DN OREF 83:17381a,17384a TΙ Quantitative analysis of cytokinin using single-ion current monitoring Thompson, A. G.; Horgan, R.; Heald, J. K. Dep. Bot. Microbiol., Univ. Coll. Wales, Aberystwyth, UK Planta (1975), 124(2), 207-10 CS SO CODEN: PLANAB; ISSN: 0032-0935 DT Journal English LA The levels of the cytokinin 6-(o-hydroxybenzylamino)-9- $\beta$ -D-ribofuranosylpurine (o-OH BAP riboside) were measured in attached leaves of poplar (Populus robusta) using the technique of single-ion current monitoring (SICM) after extraction of the cytokinin. The use of  $6-(p-hydroxybenzylamino)-9-\beta-D-ribofuranosylpurine (p-OH BAP)$ riboside) as an internal standard enabled quant. measurements of recovery to be made. 50868-58-1 RL: ANT (Analyte); ANST (Analytical study) (determination of, in poplar leaves, mass spectrometrics) RN 50868-58-1 CAPLUS Adenosine, N-[(2-hydroxyphenyl)methyl]- (CA INDEX NAME)

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T<sub>1</sub>5
     ANSWER 212 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1975:455693 CAPLUS
AN
     83:55693
DN
OREF 83:8779a,8782a
TΙ
     New cytokinin from Populus x robusta
     Horgan, R.; Hewett, E. W.; Horgan, J. M.; Purse, J.; Wareing, P. F. Dep. Bot. Microbiol., Univ. Coll. Wales, Abersywyth, UK
CS
     Phytochemistry (Elsevier) (1975), 14(4), 1005-8
SO
     CODEN: PYTCAS; ISSN: 0031-9422
DT
     Journal
LA
    English
     A new cytokinin was isolated from mature leaves of poplar. Its structure
AΒ
     was determined by uv and mass spectra and confirmed by synthesis as
     6-(o-hydroxybenzylamino)-9-\beta-D-ribofuranosylpurine. This cytokinin
     has medium activity in the soybean callus test but shows high activity in
     the radish leaf senescence test.
     50868-58-1
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
         (of Populus robusta)
     50868-58-1 CAPLUS
    Adenosine, N-[(2-hydroxyphenyl)methyl]- (CA INDEX NAME)
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ANSWER 213 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1975:400817 CAPLUS
ΑN
    83:817
DN
OREF 83:163a,166a
TΙ
    Effects of adenosine on metabolic and electrocardiographic parameters
     during a trial pacing in patients with coronary heart disease
ΑIJ
    Kugler, G.; Westermann, K. W.
CS
     II. Med. Klin. Poliklin., Univ. Hamburg-Eppendorf, Hamburg, Fed. Rep. Ger.
     Zeitschrift fuer Kardiologie (1974), 63(11), 987-1000
    CODEN: ZKRDAX; ISSN: 0300-5860
DT
    Journal
LA
    German
GΙ
     For diagram(s), see printed CA Issue.
     The adenosine derivative, metrifudil (I) [23707-33-7], a specific
     coronary dilator, given i.v. to patients with coronary heart disease at 40
     \mu g/kg increased coronary-venous O2 saturation following an increase in
     coronary blood flow but had a neg. effect during atrial pacing on
     electrocardiog.-registered hypoxic reaction and on the increase of lactate
     production Therapy of coronary heart disease with coronary dilators is
     questionable.
     23707-33-7
     RL: BIOL (Biological study)
        (heart disease treatment with)
     23707-33-7 CAPLUS
    Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)
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ANSWER 214 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
AN
     1975:140450 CAPLUS
     82:140450
DN
OREF 82:22459a,22462a
TΙ
     2-Chloroadenosines
IN
     Kikugawa, Kiyomi; Suehiro, Hideo; Ichino, Motonobu; Nakamura, Tokuro
    Kohjin Co., Ltd.
PA
     Jpn. Kokai Tokkyo Koho, 3 pp.
SO
     CODEN: JKXXAF
DT
    Patent
TιA
     Japanese
FAN.CNT 1
     PATENT NO.
                            KIND
                                  DATE
                                                 APPLICATION NO.
                                                                            DATE
                                    19741022
     JP 49110691
                                                 JP 1973-27982
                                                                            19730312
                            А
     JP 55049595
                                    19801212
                             В
PRAI JP 1973-27982
                             Α
                                    19730312
   For diagram(s), see printed CA Issue.
     2-Chloroadenosines I (Q = \beta-D-ribofuranosyl; R1 = R2 = H, alkyl, R1 =
     H, R2 = phenyl, benzyl, phenethyl with or without substituents) are prepared
     by treating 2-chloro-6-alkoxy-9-\beta-D-ribofuranosylpurines II (R = Me,
     Et, Pr) with NH3 or appropriate amines. Thus, 1 g II (R = Me) was heated with 100 ml saturated NH3 in MeOH at 100^{\circ} for 4 hr in a sealed tube to
     give 100% I (R1 = R2 = H). Also prepared were I (R1 = H; R2 = PhCH2, iso-Bu, PhCH2CH2, Ph, 2,5-dimethylbenzyl).
     38583-88-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
```

Adenosine, 2-chloro-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

38583-88-9 CAPLUS

RN

```
T. 5
    ANSWER 215 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
      1974:146487 CAPLUS
AN
      80:146487
DN
OREF 80:23653a,23656a
      N-Benzyladenosines
    Kampe, Wolfgang; Fauland, Erich; Stach, Kurt; Stork, Harald; Schmidt,
      Helmut
D\Delta
    Boehringer Mannheim G.m.b.H.
SO Ger. Offen., 18 pp.
      CODEN: GWXXBX
    Patent
LA
     German
      ____N1 NO. KIND DATE
_______
DE 2244328
FAN.CNT 1
     PATENT NO.
                                                   APPLICATION NO.
                                                                               DATE
                            A1 19740321 DE 1972-2244328
                                                    _____
    DE 2244328
                                                                               19720909
                          A1 19740321 DE 1972-2244328

A 19750305 GB 1973-41318

A 19740925 ZA 1973-6044

B 19750421 DK 1973-4859

A 19750429 US 1973-393859

A5 19740912 DD 1973-173293

A5 19760915 CH 1973-12767

A5 19760915 CH 1976-7353

A 19740312 NL 1973-12260

B2 19780331 CS 1973-6219
      GB 1385830
                                                                               19730903
      ZA 7306044
                                                                               19730904
      DK 130833
                                                                               19730904
                                                                              19730904
      US 3880829
      DD 108086
                                                                               19730905
      CH 579586
                                                                               19730905
      CH 579588
                                                                               19730905
      NL 7312260
                                                                               19730906
                            B2 19780331 CS 1973-6219
B2 19780331 CS 1976-6758
A1 19740405 FR 1973-32281
                                                                              19730906
      CS 181727
      CS 181750
                                                                               19730906
                                                  FR 1973-32281
      FR 2198749
                                                                               19730907
                                  19740502 AU 1973-60132
19750715 AT 1973-7784
      AU 7360132
                            A
                                                                               19730907
      AT 7307784
                              A
                                                   AT 1973-7784
                                                                               19730907
      AT 329192
                                    19760426
                           A1
A3
B
A1
A
                                   19760416 ES 1973-418572
19760525 SU 1973-1962240
      ES 418572
                                                                               19730907
      SU 515459
                                                                               19730907
      HU 168734
                                   19760728
19761123
                                                 HU 1973-B01461
                                                                               19730907
      CA 1000273
                                                   CA 1973-180715
                                                                               19730907
                                   19740627
19770803
19750915
19760625
      JP 49066695
                                                   JP 1973-102014
                                                                               19730910
                            В
      JP 52029755
      AT 7408451
                              Α
                                                   AT 1974-8451
                                                                               19741021
      AT 330370
US 3966916 A 19760629
SU 533338 A3 19761025
NL 7512407 A 19760227
PRAI DE 1972-2244328 A 19720909
US 1973-393859 A3 19730904
AT 1973-7784 A 19730907
                                                   US 1974-525795
                                                                               19741121
                                                   SU 1975-2099424
                                                                               19750120
                                                   NL 1975-12407
                                                                              19751023
      For diagram(s), see printed CA Issue.
      Twenty-five benzyladenosiness I [R1 = cyclopentyl, cyclohexyl, or
      2-buten-1-yl; R2 = H, 2-Me, 2,5-Me2, or 5,2-Cl(MeO); R3 = H or Ac], useful
      as antilipolytic, hypo-lipemic, and hypocholesterolemic agents, were
      prepared by amination of the chloro derivative II with the benzylamines
      optionally followed by acylation.
      52504-88-8P 52504-89-9P 52504-90-2P
ΙT
      52504-91-3P 52504-94-6P 52504-95-7P
      52504-96-8P 52504-97-9P 52504-98-0P
      52504-99-1P 52505-00-7P 52505-01-8P
      52505-02-9P 52505-03-0P 52505-04-1P
      52625-32-8P 52724-53-5P 52724-54-6P
      52724-55-7P 52724-56-8P 52724-57-9P
      RL: SPN (Synthetic preparation); PREP (Preparation)
          (preparation of)
      52504-88-8 CAPLUS
RN
CN
      Adenosine, N-cyclohexyl-N-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)
```

RN 52504-89-9 CAPLUS

Adenosine, N-cyclopentyl-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52504-90-2 CAPLUS

Adenosine, N-2-butenyl-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN

 $\begin{array}{lll} 52504-91-3 & \texttt{CAPLUS} \\ \texttt{Adenosine, N-[(5-chloro-2-methoxyphenyl)methyl]-N-(2-hydroxyethyl)-} & (9CI) \end{array}$ CN (CA INDEX NAME)

 ${\tt Absolute \ stereochemistry.}$ 

RN 52504-94-6 CAPLUS

CN Adenosine, N-cyclohexyl-N-[(2-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52504-95-7 CAPLUS

CN Adenosine, N-cyclopentyl-N-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52504-96-8 CAPLUS

CN Adenosine, N-cycloheptyl-N-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

RN

52504-97-9 CAPLUS Adenosine, N-[(2-methoxyphenyl)methyl]-N-(3-methoxypropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52504-98-0 CAPLUS

Adenosine, N-cyclohexyl-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

52504-99-1 CAPLUS RN

Adenosine, N-cycloheptyl-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX CN NAME)

RN

52505-00-7 CAPLUS Adenosine, N-[(5-chloro-2-methoxyphenyl)methyl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

52505-01-8 CAPLUS

Adenosine, N-[(2,5-dimethylphenyl)methyl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

52505-02-9 CAPLUS RN

 $\label{eq:local_point} Adenosine, \ \ \ \ \mathbb{N}-[\ (2,5-dimethylphenyl)\ methyl]-\mathbb{N}-(2-methyl-2-propenyl)-\ \ (9CI)$ (CA INDEX NAME)

RN 52505-03-0 CAPLUS
CN Adenosine, N-cyclopentyl-N-[[5-methyl-2-(methylthio)phenyl]methyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 52505-04-1 CAPLUS
CN Adenosine, N-cyclopentyl-N-[(2,5-dimethylphenyl)methyl]-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52724-53-5 CAPLUS
CN Adenosine, N-cyclohexyl-N-[(2-nitrophenyl)methyl]-, 2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52724-54-6 CAPLUS
CN Adenosine, N-[(2,5-dimethylphenyl)methyl]-N-2-propenyl-,
2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52724-55-7 CAPLUS
CN Adenosine, N-2-butenyl-N-[(2,5-dimethylphenyl)methyl]-,
2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

52724-56-8 CAPLUS RN

2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

52724-57-9 CAPLUS

Adenosine, N-[2-(acetyloxy)ethyl]-N-[(5-chloro-2-methoxyphenyl)methyl]-, 2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- ANSWER 216 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN L5
- 1974:121282 CAPLUS AN
- DN 80:121282
- OREF 80:19535a,19538a
- 2',3',5'-Tri-O-acyl-N6-benzyladenosines ΤI
- Kampe, Wolfgang; Fauland, Erich; Thiel, Max; Roesch, Egon; Dietmann, Karl IN
- PABoehringer Mannheim G.m.b.H.
- Ger. Offen., 12 pp. CODEN: GWXXBX SO
- DT Patent
- German LA
- FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI	DE 2238923	A1	19740214	DE	1972-2238923	19720808	
	CA 1003411	A1	19770111	CA	1973-177826	19730731	
	GB 1384518	A	19750219	GB	1973-36489	19730801	
	ES 417471	A1	19760301	ES	1973-417471	19730801	
	AU 7358857	A	19750206	ΑU	1973-58857	19730802	
	CH 579587	<b>A</b> 5	19760915	CH	1973-11307	19730803	
	FR 2195434	A1	19740308	FR	1973-28648	19730806	
	ZA 7305331	A	19740828	ZA	1973-5331	19730806	
	NL 7310870	A	19740212	NL	1973-10870	19730807	
	AT 7306918	A	19750115	ΑT	1973-6918	19730807	
	AT 325784	В	19751110				
	JP 49045095		19740427	JP	1973-89161	19730808	
PRAI	DE 1972-2238923	A	19720808				
GI	For diagram(s), see						
AB							
	2,4,5-Me3, 2,5-MeOCl, or 2,5-MeSCl) were prepared in 45-85% yield by						
	acylation of I (R = H) with $Ac2O$ , $BzCl$ , or nicotinoyl azide. The acyl						
		_		blo	od vessels and circu	lation than	
	the starting compds.						
ΙT	23707-33-7 34349-31-		:9-36-5				
	34349-38-7 52622-05-	-					
	<pre>RL: RCT (Reactant);</pre>	RACT (	Reactant or	rea	gent)		
	(acylation of)						
RN	23707-33-7 CAPLUS						

CN Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 34349-31-0 CAPLUS
CN Adenosine, N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 34349-36-5 CAPLUS
CN Adenosine, N-[(5-chloro-2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN

34349-38-7 CAPLUS Adenosine, N-[[5-chloro-2-(methylthio)phenyl]methyl]- (9CI) (CA INDEX CNNAME)

Absolute stereochemistry.

52622-05-6 CAPLUS RN

CNAdenosine, N-[(2,4,5-trimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

50991-70-3P 50991-71-4P 52622-00-1P 52622-01-2P 52622-02-3P 52622-03-4P 52622-04-5P 52659-41-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 50991-70-3 CAPLUS (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

50991-71-4 CAPLUS
Adenosine, N-[(2,5-dimethylphenyl)methyl]-, 2',3',5'-tri-3-CNpyridinecarboxylate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

52622-00-1 CAPLUS

Adenosine, N-[(2-methylphenyl)methyl]-, 2',3',5'-triacetate (9CI) (CA CN INDEX NAME)

RN

52622-01-2 CAPLUS Adenosine, N-[(2,5-dimethylphenyl)methyl]-, 2',3',5'-triacetate (9CI) (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

52622-02-3 CAPLUS RN

Adenosine, N-[(5-chloro-2-methoxyphenyl)methyl]-, 2',3',5'-triacetate CN (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52622-03-4 CAPLUS

Adenosine, N-[[5-chloro-2-(methylthio)phenyl]methyl]-, 2',3',5'-triacetate (9CI) (CA INDEX NAME)

RN

52622-04-5 CAPLUS Adenosine, N-[(2,4,5-trimethylphenyl)methyl]-, 2',3',5'-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

52659-41-3 CAPLUS Adenosine, N-[(2-methylphenyl)methyl]-, 2',3',5'-tribenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

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ANSWER 217 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1974:93268 CAPLUS
AN
DN
     80:93268
OREF 80:14999a,15002a
     Cytokinins in Populus x robusta. Light effects on endogenous levels
TΤ
     Hewett, E. W.; Wareing, P. F.
ΑU
     Dep. Bot. Microbiol., Univ. Coll. Wales, Aberystwyth, UK
CS
     Planta (1973), 114(2), 119-29
CODEN: PLANAB; ISSN: 0032-0935
SO
DT
     Journal
LA
    English
AΒ
     Cytokinin levels in both attached and detached mature leaves of poplar (P.
     robusta) increased transiently after short periods of exposure to red
     light. The degree and rapidity of response seems dependent on the
     physiol. condition of the leaves. The cytokinin, 6-(2-
     hydroxybenzyl)aminopurine riboside, specifically increased after red light
     treatment. Diurnal changes of leaf cytokinins occurred, with a pronounced
     peak of activity being present at daybreak.
     50868-58-1
ΤТ
     RL: BIOL (Biological study)
        (of poplar, red light effect on)
     50868-58-1 CAPLUS
RN
    Adenosine, N-[(2-hydroxyphenyl)methyl]- (CA INDEX NAME)
CN
```

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ANSWER 218 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
ΑN
     1974:27453 CAPLUS
DN
     80:27453
OREF 80:4536h,4537a
     2',3',5'-Tri-O-nicotinoyl-N-(2-methylbenzyl)adenosines
ΤI
ΙN
     Flohr, Hans; Fakhrai, Mohsen
    Ger. Offen., 8 pp.
SO
     CODEN: GWXXBX
DT
    Patent
LA
    German
FAN.CNT 1
     PATENT NO.
                         KIND
                               DATE
                                            APPLICATION NO.
                                                                    DATE
                         ____
     DE 2218553
                          A1
                                19731108
                                            DE 1972-2218553
                                                                    19720417
PΙ
     DE 2218553
                                19770714
                          В2
PRAI DE 1972-2218553
                                19720417
                         Α
     For diagram(s), see printed CA Issue.
     The adenosines I (R = H \text{ or } Me), useful for the treatment of coronary and
     peripheral blood circulation insufficiency and as antihypertensives and
     antisclerotics, were prepared by successive reaction of adenosine with
     nicotinoyl chloride in pyridine and 5,2-RMeC6H3CH2NH2 in
     Me2CHOH-(Me2CH)2NH.
     50991-70-3P 50991-71-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
```

50991-70-3 CAPLUS

RN

Adenosine, N-[(2-methylphenyl)methyl]-, 2',3',5'-tri-3-pyridinecarboxylate (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

50991-71-4 CAPLUS

Adenosine, N-[(2,5-dimethylphenyl)methyl]-, 2',3',5'-tri-3-pyridinecarboxylate (9CI) (CA INDEX NAME)

- ANSWER 219 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN L5
- AN 1973:534312 CAPLUS
- 79:134312 DN
- OREF 79:21771a,21774a
- TΙ New cytokinin from Populus robusta
- ΑU
- Horgan, R.; Hewett, E. W.; Purse, J. G.; Wareing, P. F. Dep. Bot. Microbiol., Univ. Coll. Wales, Aberystwyth, UK Tetrahedron Letters (1973), (30), 2827-8 CODEN: TELEAY; ISSN: 0040-4039 CS
- SO
- DT Journal
- LA English
- GΙ For diagram(s), see printed CA Issue.
- A new cytokinin was isolated from the leaves of P. robusta and shown to be

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ANSWER 220 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1973:413413 CAPLUS
ΑN
DN
     79:13413
OREF 79:2119a,2122a
     Inhibitors of nucleoside and nucleotide metabolism
TΙ
     Henderson, J. F.; Paterson, A. R. P.; Caldwell, I. C.; Paul, B.; Chan, M.
ΑU
     C.; Lau, K. F.
     Cancer Res. Unit, Univ. Alberta, Edmonton, AB, Can.
     Cancer Chemotherapy Reports, Part 2 (1973), 3(1), 71-85 CODEN: CCSUBJ; ISSN: 0069-0120
DT
     Journal
LA
     English
AΒ
     A total of 164 purine and pyrimidine derivs. and analogs were screened for
     inhibition of nucleoside and nucleotide metab in 4 test systems. Among a
     number of potent inhibitors identified, N6-(3-methyl-2-butenyl)-adenosine
     [7724-76-7] and 4-(dimethylamino)-7-\beta-D-ribofuranosyl-7H-pyrrolo[2,3-
     d]pyrimidine (I) [20371-00-0] inhibited de novo purine biosynthesis in
     incubated Ehrlich ascites tumor cells, \alpha\text{-(-amino-9H-purin-9-yl)-}
     \alpha \text{'-(hydroxymethyl)diglycolaldehyde-bis(phenylhydrazone)} \quad \text{(II)}
     [40297-52-7] inhibited adenine phosphoribosyltransferase [9027-80-9] from
     Ehrlich ascites tumor cells, 4-amino-5-iodo-7-β-D-ribofuranosyl-7H-
     pyrrolo[2,3-d]pyrimidine [24386-93-4] inhibited adenine kinase [9027-72-9]
     activity in tumor cell exts., and 2-amino-6-[(p-fluorobenzyl)thio]-9-
     \beta\text{-D-ribofuranosyl-9H-purine} (III) [40297-53-8] and
     N6-(p-nitrobenzyl)-adenosine [40297-54-9] inhibited nucleoside
     transport (inosine synthesis) in incubated human erythrocytes.
ΤТ
     40297-54-9
     RL: BIOL (Biological study)
        (inosine formation by erythrocytes in response to)
     40297-54-9 CAPLUS
     Adenosine, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)
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ANSWER 221 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
L5
     1973:124846 CAPLUS
ΑN
DN
    78:124846
OREF 78:20071a,20074a
    N-Benzyladenosine derivatives
TΙ
    Kampe, Wolfgang; Fauland, Erich; Thiel, Max; Juhran, Wolfgang; Stork,
ΙN
     Harald
PΑ
    Boehringer Mannheim G.m.b.H.
    Ger. Offen., 20 pp.
SO
    CODEN: GWXXBX
DТ
    Patent
LA
     German
FAN.CNT 1
                        KIND
    PATENT NO.
                              DATE
                                           APPLICATION NO.
                                                                   DATE
                         ----
                                            ______
     DE 2136624
                                19730208
                                            DE 1971-2136624
                                                                   19710722
     GB 1340643
                               19731212
                                           GB 1972-33537
                                                                   19720618
                         Α
    US 3845035
                               19741029
                                                                   19720712
                         Α
                                            US 1972-271098
                               19730530
     ZA 7204891
                                            ZA 1972-4891
                                                                   19720717
                         Α
     CH 569035
                         Α5
                               19751114
                                            CH 1975-10617
                                                                   19720719
     CH 570420
                         Α5
                               19751215
                                           CH 1972-10795
                                                                   19720719
                               19730124
                                           NL 1972-10023
    NL 7210023
                                                                   19720720
                         Α
    ES 405022
                         Α1
                               19750716
                                           ES 1972-405022
                                                                   19720720
     CA 979891
                               19751216
                                           CA 1972-147625
                                                                   19720720
                         Α1
    SU 539532
                               19761215
                                           SU 1972-1812966
                                                                   19720720
                         А3
    FR 2146493
                               19730302
                                           FR 1972-26450
                         Α1
                                                                   19720721
    AT 317446
                         В
                               19740826
                                           AT 1972-6288
                                                                   19720721
     AT 790673
                         Α
                               19750415
                                           AT 1973-7906
                                                                   19720721
PRAI DE 1971-2136624
                               19710722
                         А
GΙ
    For diagram(s), see printed CA Issue.
AΒ
     Thirty-three title compds. (I; X = NHCH2C6H5-nRn; R: = Cl, OH NH2 or Br;
     Rn = e.g. 2-OH, 3,2-HOMe, 2,5 HOCl, 2,4-HOCl) were prepared by reaction of
     I (X = Cl) containing free or acetyl group-protected OH-groups with
     H2NCH2C6H5-nRn or from the adenosine derivative and ClCH2C6H5nRn. I had
     circulatory and antilipemic effects.
     40297-54-9P 40896-25-1P 40896-26-2P
     40896-27-3P 40896-28-4P 40896-29-5P
     40896-30-8P 40896-31-9P 40896-32-0P
     40896-33-1P 40896-34-2P 40896-35-3P
     40896-36-4P 40896-37-5P 40896-38-6P
     40896-39-7P 40896-40-0P 40896-41-1P
     40896-42-2P 40896-43-3P 40896-45-5P
     40896-46-6P 40896-47-7P 40896-48-8P
     40896-49-9P 40896-50-2P 40896-51-3P
     40896-52-4P 40896-53-5P 40958-94-9P
     40958-95-0P 40958-96-1P 40958-97-2P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
RN
     40297-54-9 CAPLUS
   Adenosine, N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)
CN
```

Absolute stereochemistry.

40896-25-1 CAPLUS RN

Adenosine, N-[[2-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN

40896-26-2 CAPLUS
Administration N-[[3-(hydroxymethyl)-2-methylphenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

40896-27-3 CAPLUS RN

Adenosine, 2-chloro-N-[[2-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX

Absolute stereochemistry.

40896-28-4 CAPLUS RN

2H-Purin-2-one, 1,9-dihydro-6-[[[2-(hydroxymethyl)phenyl]methyl]amino]-9- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-29-5 CAPLUS
Adenosine, 2-bromo-N-[[3-(hydroxymethyl)-2-methylphenyl]methyl]- (9CI)
(CA INDEX NAME) CN

RN 40896-30-8 CAPLUS
CN Adenosine, N-[[3-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 40896-31-9 CAPLUS

CN Adenosine, N-[[4-chloro-2-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 40896-32-0 CAPLUS

CN Adenosine, N-[[5-(hydroxymethyl)-2-methylphenyl]methyl]- (9CI) (CA INDEX

RN 40896-33-1 CAPLUS
CN Adenosine, 2-amino-N-[[3-(hydroxymethyl)-2-methylphenyl]methyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 40896-34-2 CAPLUS
CN Adenosine, 2-bromo-N-[[2-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 40896-35-3 CAPLUS
CN Adenosine, 2-chloro-N-[[3-(hydroxymethyl)-2-methylphenyl]methyl]- (9CI)
(CA INDEX NAME)

RN 40896-36-4 CAPLUS
CN Adenosine, 2-chloro-N-[[4-chloro-2-(hydroxymethyl)phenyl]methyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 40896-37-5 CAPLUS
CN Adenosine, 2-chloro-N-[[5-chloro-2-(hydroxymethyl)phenyl]methyl]- (9CI)
(CA INDEX NAME)

 ${\tt Absolute \ stereochemistry.}$ 

RN 40896-38-6 CAPLUS CN 2H-Purin-2-one, 1,9-dihydro-6-[[[3-(hydroxymethyl)-2-methylphenyl]methyl]amino]-9- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 40896-39-7 CAPLUS
CN Adenosine, N-[[2-(hydroxymethyl)-5-methylphenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 40896-40-0 CAPLUS
CN Adenosine, N-[(2-nitrophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

40896-41-1 CAPLUS
Adenosine, N-[(5-methyl-2-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-42-2 CAPLUS Adenosine, 2-chloro-N-[(5-methyl-2-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

40896-43-3 CAPLUS

CN Adenosine, N-[(2-methoxy-5-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

RN

40896-45-5 CAPLUS
Adenosine, N-[(2-methyl-3-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-46-6 CAPLUS Adenosine, 2-chloro-N-[(2-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-47-7 CAPLUS
Adenosine, 2-chloro-N-[(3-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

40896-48-8 CAPLUS RN

McIntosh

Adenosine, 2-chloro-N-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-49-9 CAPLUS Adenosine, 2-chloro-N-[(2-methyl-3-nitrophenyl)methyl]- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

RN 40896-50-2 CAPLUS

Benzonitrile, 3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

RN 40896-51-3 CAPLUS CN Benzonitrile, 4-[[(2-chloro-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN

40896-52-4 CAPLUS Adenosine, N-[(4-cyanophenyl)methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

40896-53-5 CAPLUS

Benzonitrile, 3-[[(2-chloro-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-2-methyl- (CA INDEX NAME)

40958-94-9 CAPLUS RN

Adenosine, N-[[5-chloro-2-(hydroxymethyl)phenyl]methyl]- (9CI) (CA INDEX  ${\tt CN}$ 

Absolute stereochemistry.

RN

CNNAME)

Absolute stereochemistry.

40958-96-1 CAPLUS

Adenosine, N-[(3-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

40958-97-2 CAPLUS Adenosine, N-[(3-cyano-2-methylphenyl)methyl]- (9CI) (CA INDEX NAME) CN

# Absolute stereochemistry.

ANSWER 222 OF 233 CAPLUS COPYRIGHT 2008 ACS on SIN

1972:502140 CAPLUS 77:102140 AN

DN

OREF 77:16847a,16850a

N-[[(Hydrazinocarbonyl)phenyl]alkyl]adenosines ΤI

IN Jahn, Werner; Kampe, Wolfgang; Fauland, Erich; Juhran, Wolfgang; Stork, Harald

PΑ Boehringer Mannheim G.m.b.H.

Ger. Offen., 14 pp. CODEN: GWXXBX SO

DT Patent

LA German FAN.CNT 1

r AN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2060189	 А	19720615	DE 1970-2060189	19701208
	US 3787391	A	19740122	US 1971-201174	19711122
	NL 7116564	A	19720612	NL 1971-16564	19711202
	GB 1313459	A	19730411	GB 1971-56025	19711202
	SU 444368	<b>A</b> 3	19740925	SU 1971-1721738	19711202
	ES 397613	A1	19750316	ES 1971-397613	19711202
	AU 7136492	A	19730607	AU 1971-36492	19711203
	CH 567045	A5	19750930	CH 1971-17640	19711203
	СН 568330	A5	19751031	CH 1975-8284	19711203
	CH 568331	<b>A</b> 5	19751031	CH 1975-8285	19711203
	ZA 7108177	A	19720927	ZA 1971-8177	19711207
	HU 163227	В	19730728	HU 1971-B01335	19711207
	AT 312172	В	19731227	AT 1971-10533	19711207

	AT 318821	В	19741125	ΑT	1972-9168	19711207
	AT 318822	В	19741125	ΑT	1972-9169	19711207
	CA 960656	A1	19750107	CA	1971-129590	19711207
	FR 2117935	A5	19720728	FR	1971-43996	19711208
	FR 2117935	B1	19750314			
	SU 515454	<b>A</b> 3	19760525	SU	1973-1959114	19730824
	SU 576955	<b>A</b> 3	19771015	SU	1973-1959113	19730824
PRAI	DE 1970-2060189	A	19701208			
GI	For diagram(s), see	printe	ed CA Issue.			
AB	Fourteen title compo	ls. (I,	2-, 3-, 4-,	or	5-CONHNHR1; Q = CH2	2, CH2CH2,
	CH2CH2O; $R = H$ , $2-Me$	, 3-Cl	R1 = H, p-	ClC	6H4CO, p-MeOC6H4CO,	
	p-HOCH2CH2OC6H4CO, c	-MeC6H	14CO), useful	as	blood-circulation-a	ıctive
	and serum-lipids-low					
	tri-O-acetyladenosin	e with	R(R1NHNHCO)	С6Н	3QBr or of adenosine	9
	N-[R(EtO2C)C6H3Q] de	rivati	ve with N2H4.	.H2	0.	
ΙT	38790-41-9P 38790-42	-0P 38	3790-43-1P			
	38790-44-2P 38790-46					
	38790-48-6P 38790-49	-7P 38	3790-50-0P			
	38790-52-2P 38937-31	-4P				
	RL: SPN (Synthetic p	repara	tion); PREP	(Pr	eparation)	
	(preparation of)					
RN	38790-41-9 CAPLUS					
CN	Benzoic acid, 4-chlo	ro-, 2	$2 - [4 - [[(9 - \beta - D)]]$	-ri	bofuranosyl-9H-purin	1-6-
	yl)amino]methyl]benz	oyl]hy	drazide (CA	IN	DEX NAME)	

RN 38790-42-0 CAPLUS CN Benzoic acid, 4-methoxy-, 2-[4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]benzoyl]hydrazide (CA INDEX NAME)

RN 38790-43-1 CAPLUS CN Benzoic acid, 4-(2-hydroxyethoxy)-,  $2-[4-[[(9-\beta-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]benzoyl]hydrazide (CA INDEX NAME)$ 

Absolute stereochemistry.

RN

38790-44-2 CAPLUS Benzoic acid, 2-methyl-, 2-[4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]benzoyl]hydrazide (CA INDEX NAME) CN

38790-46-4 CAPLUS Benzoic acid, 4-methyl-3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, hydrazide (CA INDEX NAME)

Absolute stereochemistry.

38790-47-5 CAPLUS RN

Benzoic acid, 2-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, hydrazide (CA INDEX NAME)

38790-48-6 CAPLUS RN

Benzoic acid,  $4-[[(9-\beta-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, hydrazide (CA INDEX NAME)$ 

Absolute stereochemistry.

RN

38790-49-7 CAPLUS Benzoic acid, 2-methyl-3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, hydrazide (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

38790-50-0 CAPLUS RN

Benzoic acid, 3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, hydrazide (CA INDEX NAME)

Absolute stereochemistry.

RN

38790-52-2 CAPLUS Benzoic acid, 3-methyl-[[(9-eta-D-ribofuranosyl-9H-purin-6-CN yl)amino]methyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

38937-31-4 CAPLUS

Benzoic acid, 3-chloro-4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, 2-[4-(2-hydroxyethoxy)benzoyl]hydrazide (CA INDEX NAME)

```
ANSWER 223 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
    1972:502139 CAPLUS
AN
DN
     77:102139
OREF 77:16847a,16850a
TI N-(Acylbenzyl- and -phenethyl) adenosines
    Kampe, Wolfgang; Fauland, Erich; Stork, Harald; Juhran, Wolfgang;
TN
     Dietmann, Karl
PΑ
     Boehringer Mannheim G.m.b.H.
SO
    Ger. Offen., 20 pp.
    CODEN: GWXXBX
DT
   Patent
LA
    German
FAN.CNT 1
                        שדאום האדם
                                          ADDITCATION NO
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2059922	A	19720615	DE 1970-2059922	19701205
	US 3817981	A	19740618	US 1971-199727	19711117
	SU 469253	<b>A</b> 3	19750430	SU 1971-1723201	19711130
	SU 506294	<b>A</b> 3	19760305	SU 1971-1913745	19711130
	NL 7116563	A	19720607	NL 1971-16563	19711202
	GB 1313290	A	19730411	GB 1971-56024	19711202
	ES 397612	A1	19750316	ES 1971-397612	19711202
	CH 567044	<b>A</b> 5	19750930	CH 1971-17633	19711202
	CH 573445	<b>A</b> 5	19760315	CH 1975-8318	19711202
	FR 2116517	A5	19720713	FR 1971-43419	19711203
	FR 2116517	B1	19750801		
	ZA 7108104	A	19720927	ZA 1971-8104	19711203
	AU 7136493	A	19730607	AU 1971-36493	19711203
	HU 163670	В	19731027	HU 1971-B01334	19711203
	AT 314094	В	19740325	AT 1971-10436	19711203
	CA 960655	A1	19750107	CA 1971-129319	19711203
	AT 323335	В	19750710	AT 1971-323335	19711203
PRA:	I DE 1970-2059922	A	19701205		
CT	Tax diamon (a)		ad C7 Tacina		

GI For diagram(s), see printed CA Issue.

AB Forty-five title compds. (I, Y = X,2-R(R1)C6H39CH2)nNH; n = 1,2; R = 3- or 4-carboxy, -alkoxycarbonyl, -carbamoyl, -allylcarbamoyl; R1 = H, Me; R2 = H, C1, OH) (II), useful as hypolipemic agents with effects on circulation, were prepared by reaction of the corresponding I (Y = CL) (III) with X,2-R(R1)C6H3(CH2)nNH2 and subsequent saponification or amidation. Thus, refluxing III (R2 = H) and 3-Eto2C-C6H4CH2CH2NH2.HC1 in EtoH in the presence of Et3N for 3 hr gave 65% II (n = 2, R = 3-Eto2C, R1 = R2 = H), which was heated in EtoH at 120° for 15 hr with NH3 to give 64% II

(n = 2, R = 3-H2NCO, R1 = R2 = 5h).

IT 38823-49-3P 38823-50-6P 38823-51-7P 38823-52-8P 38823-53-9P 38823-54-0P 38823-55-1P 38823-56-2P 38823-59-5P 38823-60-8P 38823-62-0P 38823-64-2P 38823-65-3P 38823-66-4P 38823-67-5P

RN 38823-50-6 CAPLUS

CN Benzoic acid, 2-methyl-3-[[(9-β-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 38823-51-7 CAPLUS

CN Benzoic acid, 4-[[(2-chloro-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN

38823-52-8 CAPLUS Benzoic acid, 3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, methyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

38823-53-9 CAPLUS

RN

Benzoic acid, 2-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME) CN

RN 38823-54-0 CAPLUS CN Benzoic acid, 4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 38823-55-1 CAPLUS

CN Benzoic acid,  $3-[[(9-\beta-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, 1-methylethyl ester (CA INDEX NAME)$ 

Absolute stereochemistry.

RN 38823-56-2 CAPLUS

CN Benzoic acid, 4-methyl-3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

38823-59-5 CAPLUS

Benzoic acid, 3-methyl-4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

38823-60-8 CAPLUS Benzoic acid, 3-[[(2-chloro-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME) CN

38823-62-0 CAPLUS

Benzoic acid, 3-[[(2-bromo-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

38823-64-2 CAPLUS Benzoic acid, 3-[[(2-hydroxy-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

38823-65-3 CAPLUS Benzoic acid,  $4-[[(9-\beta-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-$ RN (CA INDEX NAME)

Absolute stereochemistry.

RN

38823-66-4 CAPLUS Benzoic acid, 2-methyl-3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

38823-67-5 CAPLUS

Benzoic acid,  $2-[[(9-\beta-D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-$ (CA INDEX NAME)

RN

38823-68-6 CAPLUS Benzoic acid, 3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]-(CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

38823-69-7 CAPLUS RN

Benzoic acid, 4-methyl-3-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

38823-72-2 CAPLUS

Benzoic acid, 3-methyl-4-[[(9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME)

38823-73-3 CAPLUS RN

Benzoic acid, 3-[[(2-chloro-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN

38823-74-4 CAPLUS
Adenosine, N-[[3-(aminocarbonyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 38823-76-6 CAPLUS
CN Adenosine, N-[[2-(aminocarbonyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

38823-77-7 CAPLUS RN

Adenosine, N-[[4-(aminocarbonyl)phenyl]methyl]-2-chloro- (9CI) (CA INDEX NAME )

Absolute stereochemistry.

38823-78-8 CAPLUS

Adenosine, N-[[4-(aminocarbonyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

RN

38823-79-9 CAPLUS
Adenosine, N-[[5-(aminocarbonyl)-2-methylphenyl]methyl]- (9CI) (CA INDEX CNNAME)

Absolute stereochemistry.

RN

38823-81-3 CAPLUS
Adenosine, N-[[3-(aminocarbonyl)-2-methylphenyl]methyl]- (9CI) (CA INDEX CN NAME)

RN

Adenosine, N-[[4-(aminocarbonyl)-2-methylphenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

38823-84-6 CAPLUS Adenosine, N-[[4-(aminocarbonyl)phenyl]methyl]-2-bromo- (9CI) (CA INDEX CN NAME)

RN

38823-85-7 CAPLUS
Adenosine, N-[[4-(aminocarbonyl)phenyl]methyl]-1,2-dihydro-2-oxo- (9CI) CN(CA INDEX NAME)

Absolute stereochemistry.

RN

38823-86-8 CAPLUS Adenosine, N-[[2-[(methylamino)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

RN

38823-88-0 CAPLUS
Adenosine, N-[[3-[(methylamino)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

38823-89-1 CAPLUS
Adenosine, N-[[4-[(methylamino)carbonyl]phenyl]methyl]- (9CI) (CA INDEX CN

Absolute stereochemistry.

38823-90-4 CAPLUS RN

Adenosine, N-[[2-methyl-3-[(methylamino)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

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ANSWER 224 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
L5
     1972:483708 CAPLUS
ΑN
DN
     77:83708
OREF 77:13769a,13772a
     Clinical-pharmacological studies with a new orally active adenosine
TΙ
     derivative
ΑU
     Schaumann, E.; Kutscha, W.
     I. Med. Klin. Mannheim, Univ. Heidelberg, Mannheim, Fed. Rep. Ger.
CS
    Arzneimittel-Forschung (1972), 22(4), 783-90
SO
     CODEN: ARZNAD; ISSN: 0004-4172
DТ
     Journal
LA
     German
    Metrifudil [N6-(o-methylbenzyl)adenosine] (I) [23707-33-7] was
AΒ
     tested in humans. Administration of 0.03 mg/kg i.v. and of 0.35 mg/kg
     orally increased the heart rate and cardiac output. Neither impairment of
     atrioventricular conduction nor other alterations of the electrocardiogram
     was observed Uneasiness and other side effects were caused by i.v. and oral
     administration of 0.1 and 0.47-0.53 mg I/kg, resp. The limit of
     tolerability was reached earlier if the speed of i.v. infusion exceeded 16
     \mu g/kg/min. No critical changes in circulatory parameters were found. I.v. injection of I caused no inflammation or alteration of the veins.
     μg/kg/min.
     The concentration of serum fatty acids was lowered only by i.v. administration of
     I. A 50% absorption of I was estimated by comparing the increase of the heart
     rate after i.v. and oral administration.
     23707-33-7
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (pharmacol. of)
     23707-33-7 CAPLUS
RN
     Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)
```

```
ANSWER 225 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
    1972:475423 CAPLUS
AN
DN
     77:75423
OREF 77:12459a,12462a
   N-(2,5-Dimethylbenzyl)-2-chloroadenosine
TΙ
     Kampe, Wolfgang; Fauland, Erich; Thiel, Max; Stork, Harald; Dietmann, Karl
ΙN
PA
    Boehringer Mannheim G.m.b.H.
    Ger. Offen., 5 pp.
SO
     CODEN: GWXXBX
DT
    Patent
LA
    German
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                            APPLICATION NO.
                         ____
    DE 2055160
                                19720518
                                            DE 1970-2055160
                                                                    19701110
PΙ
                          Α
    NL 7115188
                          Α
                                19720515
                                            NL 1971-15188
                                                                    19711104
     ZA 7107391
                                19720830
                                            ZA 1971-7391
                                                                    19711104
                          Α
     GB 1315735
                               19730502
                                            GB 1971-51344
                                                                    19711104
                          Α
                                            HU 1971-B01330
    HU 164380
                               19740228
                          В
                                                                    19711104
    ES 396653
                          A1
                                19740601
                                            ES 1971-396653
                                                                    19711104
     SE 380026
                          В
                               19751027
                                            SE 1971-14090
                                                                    19711104
     CH 551424
                                19740715
                                            CH 1971-16159
                                                                    19711105
                          Α
    CA 953715
                                19740827
                                            CA 1971-127184
                                                                    19711108
                          A 1
    AT 303976
                          В
                               19721227
                                            AT 1971-9668
                                                                    19711109
     SU 413678
                          АЗ
                                19740130
                                            SU 1971-1715932
                                                                    19711109
                                            FR 1971-40243
     FR 2113889
                                19720630
                                                                    19711110
                          Α5
                                19750606
     FR 2113889
                          В1
PRAI DE 1970-2055160
                          Α
                                19701110
     For diagram(s), see printed CA Issue.
    The title compound (I), useful in the treatment of atherosclerotic diseases,
     was prepared in 77.6% yield by refluxing the protected dichloro derivative
     with 2,5-Me2C6H3CH2NH2 in the presence of Et3N and subsequent cleavage of
     the protecting Ac groups with NH3-saturated MeOH.
     38583-88-9P
ΙT
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
     38583-88-9 CAPLUS
    Adenosine, 2-chloro-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)
```

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ANSWER 226 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
L5
     1972:456780 CAPLUS
ΑN
DN
     77:56780
OREF 77:9361a,9364a
     {\tt Antilipolytic} \ {\tt and} \ {\tt antihyperlipemic} \ {\tt N-substituted} \ {\tt adenosine} \ {\tt derivatives}
TΙ
ΙN
     Stork, Harald; Schmidt, Felix Helmut; Thiel, Max; Fauland, Erich; Kampe,
     Wolfgang
    Boehringer Mannheim G.m.b.H.
    Ger. Offen., 10 pp.
SO
     CODEN: GWXXBX
DT
    Patent
```

## LA German FAN.CNT 1

11111	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2052596	A	19720504	DE 1970-2052596	19701027
	US 3851056	A	19741126	US 1971-189409	19711014
	IL 37975	A	19750313	IL 1971-37975	19711020
	GB 1325970	A	19730808	GB 1971-48998	19711021
	ZA 7107083	A	19720830	ZA 1971-7083	19711022
	BE 774399	A1	19720425	BE 1971-109690	19711025
	AU 7134971	A	19730503	AU 1971-34971	19711025
	CA 983395	A1	19760210	CA 1971-126166	19711026
	FR 2111862	<b>A</b> 5	19720609	FR 1971-38539	19711027
	FR 2111862	B1	19750801		
PRAI	DE 1970-2052596	A	19701027		

AB Forty-four title compds. [I; R = e.g. H or Cl; R1 = e.g. sec-Bu, EtCHMeCHMe, PrCHMe, o-MeC6H4CH2CH2, m-MeOC6H4CH2CHMe, o-MeC6H4CH(OH)CH2, PhOCH2CHMe, cyclopentyl, o-CF3C6H4, 2,5-Me2C6H3CH2, m-Ho2C6H4] decreased the concentration of free fatty acids in rat serum by 40-83% when given at 0.125-0.5 mg/kg. Thus, N6-sec-butyladenosine [35440-64-3] lowered serum free fatty acid concentration by 54% within 1 hr after i.p. administration of 0.5 mg/kg.

IT 38583-88-9

RL: BIOL (Biological study)

(for hyperlipemia treatment)

RN 38583-88-9 CAPLUS

CN Adenosine, 2-chloro-N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

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L5 ANSWER 227 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
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AN 1972:154069 CAPLUS

DN 76:154069

OREF 76:25121a,25124a

TI Novel synthesis of N6-substituted adenosines and their coronary dilator

AU Shimizu, Bunji; Kaneko, Masakatsu; Saito, Akio; Nishino, Hiroshi; Mizuno, Hiroshi; Nakayama, Koichi; Ohshima, Takeshi; Koike, Hiroyuki

CS Sankyo Res. Lab., Tokyo, Japan

SO Sankyo Kenkyusho Nenpo (1971), 23, 117-23

CODEN: SKKNAJ; ISSN: 0080-6064

DT Journal

LA Japanese

AB N6-Substituted adenosine derivs. (PhCH2, PhCH2CH2, naphthylmethyl, Me2CHCH2, o-MeC6H4-CH2, m-MeC6H4CH2, p-MeC6H4CH2, furfurylmethyl) in addition to N6-benzyl-9-(β-D-arabinofuranosyl)adenine, and N6-benzyl-9-(β-D-glucopyranosyl)adenine were synthesized directly from adenosine by exchange amination reactions of the corresponding purine or pyrimidine bases. The mechanism of formation of these nucleosides and their coronary-dilating activities were described.

IT 23707-33-7P 35940-03-5P 35940-04-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as blood vessel dialators)

RN 23707-33-7 CAPLUS
CN Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

35940-03-5 CAPLUS

Adenosine, N-[(3-methylphenyl)methyl]- (CA INDEX NAME)

 ${\tt Absolute \ stereochemistry.}$ 

RN

35940-04-6 CAPLUS Adenosine, N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

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ANSWER 228 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
     1971:541121 CAPLUS
AN
DN
     75:141121
OREF 75:22273a,22276a
     Coronary dilating N6-benzyladenosines
ТΤ
     Kampe, Wolfgang; Fauland, Erich; Thiel, Max; Dietmann, Karl; Juhran,
ΙN
     Wolfgang
PΑ
     Boehringer Mannheim G.m.b.H.
     Ger. Offen., 10 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                                APPLICATION NO.
                                                                           DATE
                           ----
                                                 ______
PΤ
     DE 2007273
                            Α
                                   19710826
                                                 DE 1970-2007273
                                                                           19700218
     SU 399134
                                   19730927
                                                 SU 1971-1616102
                                                                           19710129
                            А3
     US 3781273
                                   19731225
                                                 US 1971-112424
                                                                           19710203
                            Α
                                                 ES 1971-388194
                                                                           19710212
     ES 388194
                                   19730501
                            Α1
     NL 7102026
                            Α
                                   19710820
                                                 NL 1971-2026
                                                                           19710216
     DK 123357
                            В
                                   19720612
                                                 DK 1971-694
                                                                           19710216
     HU 162739
                            В
                                   19730428
                                                 HU 1971-B01274
                                                                           19710216
                                                 CH 1971-2208
     CH 549596
                                   19740531
                                                                           19710216
                            Α
     CH 549600
                            Α
                                   19740531
                                                 CH 1974-2849
                                                                           19710216
     CA 953714
                            Α1
                                   19740827
                                                 CA 1971-105563
                                                                           19710216
     ZA 7101030
                                   19711124
                                                 ZA 1971-1030
                                                                           19710217
                            Α
     FR 2081524
                                   19711203
                                                FR 1971-5318
                            Α5
                                                                           19710217
     FR 2081524
                            В1
                                   19740927
     AT 306251
                                   19730410
                                                 AT 1971-1378
                                                                           19710217
                            В
                                                AT 1972-1233
     AT 313483
                            В
                                   19740225
                                                                           19710217
     JP 51016440
                                                 JP 1971-7691
                                   19760524
                            B
                                                                           19710218
     GB 1279946
                                   19720628
                                                 GB 1971-1279946
                                                                           19710419
                            Α
PRAI DE 1970-2007273
                                   19700218
                            Α
     For diagram(s), see printed CA Issue.
GΙ
     The title compds. (I, where R = Me, MeS, or MeO, R1 = 5-Me, 5-Cl, 5-MeO, 5-iso-Pr, 5-F, 5-tert-Bu, 3-Me, or 3-Cl) were prepared wither by amination
AΒ
     of the 6-chloro derivative or by N1-substitution of adenosine followed by alkaline
     rearrangement. Thus, 9-(2,3,5-\text{tri-O-acetyl}-\beta-D-\text{ribofuranosyl})-6- chloropurine, 2,5-Me2C6H3CH2NH2, and Et3N in iso-PrOH was refluxed 3 hr
     and the protective Ac groups cleaved by NaOMe to give 61% I (R = Me, R1 =
     5-Me). Similarly prepared were 11 other I. 34349-31-0P 34349-32-1P 34349-33-2P
     34349-34-3P 34349-35-4P 34349-36-5P
     34349-37-6P 34349-38-7P 34349-39-8P
     34349-40-1P 34349-41-2P 34422-72-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
RN
     34349-31-0 CAPLUS
     Adenosine, N-[(2,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)
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RN 34349-32-1 CAPLUS

Adenosine, N-[5-methyl-2-(methylthio)benzyl]- (8CI) (CA INDEX NAME) Absolute stereochemistry.

34349-33-2 CAPLUS RN CN

Adenosine, N-(5-chloro-2-methylbenzyl)- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

34349-34-3 CAPLUS RN

CNAdenosine, N-(5-methoxy-2-methylbenzyl)- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

34349-35-4 CAPLUS RN

Adenosine, N-(2-methoxy-5-methylbenzyl)- (8CI) (CA INDEX NAME)

RN 34349-36-5 CAPLUS

Adenosine, N-[(5-chloro-2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN

34349-37-6 CAPLUS Adenosine, N-[(5-fluoro-2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

RN

34349-38-7 CAPLUS Adenosine, N-[[5-chloro-2-(methylthio)phenyl]methyl]- (9CI) (CA INDEX CN NAME)

RN 34349-39-8 CAPLUS

Adenosine, N-(5-tert-butyl-2-methylbenzyl)- (8CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN

34349-40-1 CAPLUS Adenosine, N-[(2,3-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN

34349-41-2 CAPLUS Adenosine, N-[(3-chloro-2-methylphenyl)methyl]- (9CI) (CA INDEX NAME) CN

RN 34422-72-5 CAPLUS CN Adenosine, N-(5-isopropyl-2-methylbenzyl)- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

(hyperemia response to)

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ANSWER 229 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
L5
    1971:433660 CAPLUS
ΑN
DN
    75:33660
OREF 75:5316h,5317a
     Pharmacological effects on coronary reactive hyperemia in conscious dogs
TΙ
     Juhran, W.; Voss, E. M.; Dietmann, K.; Schaumann, W.
ΑU
CS
     Pharmakol. Lab., Boehring Mannheim G.m.b.H., Mannheim, Fed. Rep. Ger.
    Naunyn-Schmiedebergs Archiv fuer Pharmakologie (1971), 269(1), 32-47
    CODEN: NNAPBA; ISSN: 0340-5249
DТ
    Journal
LA
     English
GΙ
     For diagram(s), see printed CA Issue.
     In conscious dogs, threshold doses of dipyridamole (I) and lidoflazine
     (II), which potentiate the dilation of coronary vessels by adenosine,
     increased reactive hyperemia in response to arterial occlusion lasting >30
     sec, whereas threshold doses of coronary dilators, such as
    N6-(o-methylbenzyl) adenosine (III) and carbochromen (IV), which do not
    potentiate adenosine, did enhance reactive hyperemia for any duration of
     occlusion. Theophylline decreased the duration of reactive hyperemia, but
     not the excess flow. Procaine-HCl infused into the coronary artery caused
     a dose-dependent reduction of the reactive hyperemia. Apparently, appreciable
     amts. of adenosine were liberated only during complete anoxia for >30 sec.
     Under physiol. conditions coronary resistance was probably regulated by a
    nervous mechanism and not by adenosine liberation.
     23707-33-7
     RL: BIOL (Biological study)
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RN 23707-33-7 CAPLUS
CN Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 230 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1971:86054 CAPLUS

DN 74:86054

OREF 74:13963a,13966a

TI Inhibition of induced thrombocyte aggregation by adenosine and adenosine derivatives. II. Correlation between inhibition of the aggregation and peripheral vasodilatation

AU Dietmann, Karl; Birkenheier, H.; Schaumann, Wolfgang

CS Med. Forsch., Firma Boehringer Mannheim G.m.b.H., Mannheim-Waldhof, Fed. Rep. Ger.

SO Arzneimittel-Forschung (1970), 20(11), 1749-51 CODEN: ARZNAD; ISSN: 0004-4172

DT Journal

LA German

 $\operatorname{GI}$  For diagram(s), see printed CA Issue.

AB The ability of adenosine (I) and 20 adenosine derivs. to produce vasodilation in rabbits was correlated with their ability to antagonize ADP-induced thrombocyte aggregation in vitro. The N6-phenylalkyl substituted derivs., N6-(cis, trans-2-phenylcyclo-pentyl)adenosine and N6-(trans-dl-2-phenylcyclopentyl)adenosine (II), were more active than the aliphatic substituted derivs., 2-chloro-N6-propyl-, 2-chloro-N6-allyl-, and 2-chloro-N6-sec-butyladenosines, as well as the N6-benzyl derivs., 2-chloro-N6-benzyladenosine, 2-amino-N6-(2-chlorobenzyl)adenosine, N6-(o-xylyl)adenosine, N6-(o-trifluoromethylbenzyl)adenosine, and N6-(3,5-dimethoxybenzyl)adenosine. The most active derivative, II, was half as active as adenosine.

IT 23660-99-3 23661-01-0 23707-33-7

26783-35-7

RL: BIOL (Biological study)

(blood platelet aggregation and vasodilation by)

RN 23660-99-3 CAPLUS

CN Adenosine, N-[(3,5-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 23661-01-0 CAPLUS
CN Adenosine, N-[[2-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 23707-33-7 CAPLUS
CN Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 26783-35-7 CAPLUS
CN Adenosine, 2-amino-N-[(2-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)

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ANSWER 231 OF 233 CAPLUS COPYRIGHT 2008 ACS on STN
AN
     1970:21921 CAPLUS
     72:21921
DN
OREF 72:4037a,4040a
ΤI
     2-Aminoadenosine derivatives with cardiac activity
IN
     Koch, Klaus; Fauland, Erich; Stach, Kurt; Thiel, Max; Schaumann, Wolfgang;
     Dietmann, Karl
     Boehringer, C. F., und Soehne G.m.b.H. S. African, 25 pp.
PA
SO
     CODEN: SFXXAB
DТ
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                              APPLICATION NO.
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                          ----
                                  _____
     ZA 6805477
                                 19690128
PT
     DE 1670265
     FR 1587681
     GB 1164580
                                              GB
     US 3590029
                                 19710629
                                              US
                                                                       19680822
PRAI DE
                                 19670825
GΙ
     For diagram(s), see printed CA Issue.
     The title compds. [I, R = NHR1 (II), R1 = PhCH2, (Ph)MeCHC H2, Pr,
     o-ClC6H4CH2, iso-Bu, o-MeC6H4CH2, o-F3CC6H4, furf uryl,
     3,4-(MeO)2C6H3CH2CH2, PhCH(OH)CHMe, PhCH(CO2H), allyl, cyclohexyl,
     2-hydroxy-3-(m-cresoxy)propyl, 2-phenylcyclopropyl, 1-adamantyl, 2-(β-indolyl)ethyl, 2-indanyl, Bu, benzhydryl, 2,4-Cl2C6H3CH2,
     p-HoC6H4CH2CH2, o-PhoC6H4CH2, o-MeOC6H4CH2, PhcH2CH2, 3,5-(MeO)2C6H3CH2,
     p-ClC6H4CH2, 2-ethylhexyl, m-FC6H4CH2, HOCH2CH2, PhCHMe,
     2-phenylcyclohexyl, PhOCH2CHMe, 2-hydroxy-3-(\alpha-naphthoxy)propyl,
     Me2C:CHCH2, p-02NC6H4-CH0HCH2, p-MeSO2NHC6H4CH2 or EtCHCH2OH] are prepared
     from I (R = Br) (III) and appropriate amines. II has cardiac and
     circulatory activities. For example, a mixture of 5 g III, 1.71 g PhCH2NH2
     and 2.92 g Et3N in 50 ml Me2CHOH was refluxed 3 hr to give 29% II (R1 =
     PhCH2), m. 92° (decomposition). 2',3',5'-Tri-O-acetyl-2-amino-6-
     chloronebularin was also used in place of III, and the resulting
     substitution product was hydrolyzed to give II.
     26775-33-7P 26775-34-8P 26775-36-0P
     26775-37-1P 26775-38-2P 26783-35-7P
     26783-37-9P 26783-38-0P 26783-46-0P
     26884-43-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
     26775-33-7 CAPLUS
RN
     9H-Purine, 2-amino-6-[(o-phenoxybenzyl)amino]-9-\beta-D-ribofuranosyl-
     (8CI) (CA INDEX NAME)
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26775-34-8 CAPLUS Adenosine, 2-amino-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME) RN  ${\tt CN}$ 

Absolute stereochemistry.

26775-36-0 CAPLUS Adenosine, 2-amino-N-[(3,5-dimethoxyphenyl)methyl]- (9CI) (CA INDEX NAME) RNCN

Absolute stereochemistry.

26775-37-1 CAPLUS Adenosine, 2-amino-N-[(4-chlorophenyl)methyl]- (9CI) (CA INDEX NAME) RN

 ${\tt CN}$ 

RN 26775-38-2 CAPLUS

CN Adenosine, 2-amino-N-[(3-fluorophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 26783-35-7 CAPLUS

CN Adenosine, 2-amino-N-[(2-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 26783-37-9 CAPLUS

CN Adenosine, 2-amino-N-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

NAME)

Absolute stereochemistry.

26783-46-0 CAPLUS

Methanesulfono-p-toluidide,  $\alpha$ -[(2-amino-9- $\beta$ -D-ribofuranosyl-9H-purin-6-yl)amino]- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

T. 5

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26884-43-5 CAPLUS
RN
    Adenosine, 2-amino-N-[(2,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)
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ANSWER 232 OF 233 CAPLUS COPYRIGHT 2008 ACS on SIN
AN
     1969:115505 CAPLUS
     70:115505
DN
OREF 70:21591a,21594a
TΙ
    N6-Aralkyl adenosine derivatives
ΤN
     Thiel, Max; Stach, Kurt; Jahn, Werner; Schaumann, Wolfgang; Dietmann, Karl
     Boehringer, C. F., und Soehne G.m.b.H.
PΑ
     S. African, 15 pp.
SO
     CODEN: SFXXAB
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                            KIND
                                   DATE
                                                  APPLICATION NO.
                                                                              DATE
     ZA 6707414
                                     19680502
     DE 1670171
     FR 1550512
                                                   FR
     GB 1145789
                                                   GB
     US 3506643
                                     19700414
                                                                              19671018
PRAI DE
                                     19661209
     DF.
                                     19670711
OS
     MARPAT 70:115505
GΙ
     For diagram(s), see printed CA Issue.
    The title compds. (1), where halogen, alkyl, alkoxy, F3C or alkylthio, or
     two substituents may be H or a methylenedioxy, are prepared from the
     corresponding D-ribosides and benzylamines, or from the corresponding N'-substituted adenosine derivs. Thus, 8.2 g. tri-O-acetyl-6-chloro-9-\beta-D-ribosyl-9-H-purine and 7.2 g. 2-ClC6H4CH2NH2 in 120 cc. iso-PrOH
     were refluxed 2 hrs., worked up and the residue dissolved in 100 cc. MeOH,
     10 cc. N NaOH solution added and the mixture refluxed 1 hr. to yield 4 g. I (R
     = 2-Cl), m. 182-3°. The following I were similarly prepared (R and m.p. given): 3,4-Cl2, 182-3°; 4-MeO, 146-7°; 3,4(MeO)2,
     135-6°; 3,4,5-(MeO)3, 118-19°; 2,6-Cl2, 207-9°; 4-Cl, 174-5°; 3-Cl, 168-9°; 2-MeO, 147-8°; 2-Me,
     157-8°; 3,5-(MeO)2, 191-2°; 2-MeS, 127-8°; 2-F3C, 160-1°; and 3-F3C, 111-12°. To a suspension of 10 g.
     2',3'-O-isopropylideneadeno-sine in 200 cc. MeCN, 10 g. p-BrC6H4Br was
     added and the mixture refluxed 24 hrs. with stirring. The precipitate which formed
     was filtered off, dissolved in 150 cc. MeOH and an equal volume 2N NaOH
     solution was added. The mixture was heated on a steam bath 20 min., extracted with
     CHCl3, evaporated, and the residue dissolved in 200 cc. HCO2N. Water was
     added until the mixture became cloudy. The mixture was left standing 1 day at
     ambient temperature, after which it was evaporated in vacuo, and the residue made
     weakly alkaline with an aqueous solution of concentrated NH3 to yield 5.8 \text{ g. I} (R = 4-Br),
     m. 168-9°. I exhibit an effect on blood vessels and circulation.
     23660-95-9P 23660-96-0P 23660-97-1P
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RN 23660-96-0 CAPLUS
CN Adenosine, N-[(4-chlorophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 23660-97-1 CAPLUS
CN Adenosine, N-[(3-chlorophenyl)methyl]- (CA INDEX NAME)

23660-98-2 CAPLUS RN

Adenosine, N-[(2-methoxyphenyl)methyl]- (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

RN

23660-99-3 CAPLUS Adenosine, N-[(3,5-dimethoxyphenyl)methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

23661-00-9 CAPLUS RN

Adenosine, N-[o-(methylthio)benzyl]- (8CI) (CA INDEX NAME) CN

23661-01-0 CAPLUS RN

Adenosine, N-[[2-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

RN

23661-03-2 CAPLUS Adenosine, N-[[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME) CN

Absolute stereochemistry.

23666-23-1 CAPLUS RN

Adenosine, N-[(3,4-dichlorophenyl)methyl]- (CA INDEX NAME)  ${\tt CN}$ 

RN 23666-24-2 CAPLUS
CN Adenosine, N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 23666-25-3 CAPLUS
CN Adenosine, N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

RN 23666-26-4 CAPLUS
CN Adenosine, N-[(3,4,5-trimethoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 23666-27-5 CAPLUS CN Adenosine, N-[(4-bromophenyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

23707-32-6 CAPLUS
Adenosine, N-[(2-chlorophenyl)methyl]- (CA INDEX NAME)

RN 23707-33-7 CAPLUS

CN Adenosine, N-[(2-methylphenyl)methyl]- (CA INDEX NAME)

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L5
    ANSWER 233 OF 233 CAPLUS COPYRIGHT 2008 ACS on SIN
ΑN
    1969:88212 CAPLUS
DN
    70:88212
OREF 70:16513a
ΤI
   Adenosines
IN
    Kampe, Wolfgang; Thiel, Max; Stach, Kurt; Schaumann, Wolfgang; Dietmann,
    Karl
   Boehringer, C. F., und Soehne G.m.b.H. S. African, 35 pp.
PΑ
SO
    CODEN: SFXXAB
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                       KIND
                              DATE
                                          APPLICATION NO.
                                                               DATE
                              -----
ΡI
    ZA 6707630
                              19680425
    DE 1670175
                                          DE
    FR 1558462
                                          FR
    GB 1143150
                                          GB
                              19661221
PRAI DE
   For diagram(s), see printed CA Issue.
    A mixture of 4.5 g. tri-O-acetyl-2,6-dichloro-9-(\beta-D-
    was refluxed 2 hrs. in 50 ml. iso-PrOH, evaporated in vacuo, and taken up in
    Et20-H20, the ether phase washed twice with water, dried, and evaporated, the
    residue mixed with 40 ml. MeOH saturated with NH3, the mixture kept overnight at
    room temperature, treated with activated charcoal, and filtered, the filtrate
    evaporated, the residue dissolved in EtOAc, ligroine added dropwise with
    stirring, and the precipitate filtered off, washed with ligroine and dried to
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give 47\% 2-chloro-N-(D-1-phenyl-2-propyl)-adenosine, m. 65^{\circ}
(decomposition). Similarly prepared I (R1 = C1) were (R, m.p., and % yield
given): DL-PhCH2CHMe, 64-6° (chromatog. on silica gel with 6:1
CHCl3-MeOH), 66; p-ClC6H4CH2, 85-7°, 81; o-ClC6H4CH2, 80-3°
(chromatog. on silica gel with 6:1 CHCl3-MeOH), 42; m-ClC6H4CH2,
65-7° (chromatog.) 23; PhCH2, 149-52° (benzene-EtOAc), 51;
Ph-CH2CH2, 87-9°
                    (decomposition) (chromatog.), 54; PhMeCH, 102-3°
(decomposition) (chromatog.), 34; trans-2-phenylcyclopropyl, 118-20° (chromatog.), 36; Pr, 97-100° (decomposition) (chromatog.), 44; iso-Bu,
168-70° (EtOAc), 20; allyl, 123-6°, 68; iso-Pr, 92-5°
(decomposition) (chromatog.), 64; L-threo-PhCH(OH)CHMe, 97-100° (MeOH), 34; L-erythro-PhCH(OH)CHMe, 130-2° (MeCN), 68; m-MeC6H4OCH2CH(OH)CH2, 84-6° (chromatog.), 45; 2-phenylcyclopentyl,
107-10° (chromatog.), 52; 2-phenylcyclohexyl, 108-11°
(chromatog.), 30; o-MeOC6H4CH2, 106-9° (chromatog.), 43;
3,5-(MeO)2C6H3CH2, 187-9° (MeOH), 44; sec-Bu, 102-4°
(chromatog.) 33; 2-hydroxypropyl 3-(\alpha-naphthyloxy) 120-3°,
(chromatog.), 34; L-(+)-threo-PhCH(OH)-CHCH2OH, 80-2° (chromatog.), 55; L-PhCH2CHMe, 94-6° (chromatog.), 62; o-MeC6H4CH2, 103-5°
(chromatog.), 52; 2-phenoxycyclopropyl, 100-3° (chromatog.), 41; DL-m-MeOC6H4-CH(OH)CH2, 84-90° (chromatog.), 38; Me2CH(CH2)5,
103-5° (chromatog.), 34; DL-PhOCH2CHMe, 98-101°
(chromatog.), 43; D-(+)-PhCH2CHCH2OH, 102-4° (chromatog.), 43; m-MeOC6H4CH2CH2, 86-9° (chromatog. on silica gel with 1:1
CHCl3-MeOH), 54; DL-[3,4-(MeO)2C6H4CH2CHMe], 104-6° (chromatog.),
21; DL-(m-MeC6H4OCH2CHMe), 102-5° (chromatog.), 35; L-PhOCH2CHMe,
108-10° (chromatog.), 36.5; m-HOC6H4CH2, 158-61° (MeCN), 25.
Similarly prepared I (R1 = NH2) were (purine starting material, R, m.p., and
% yield given); 2-amino-6-bromo-9-(\beta-D-ribofuranosyl)purine,
o-Me-OC6H4CH2, -, -; 2-amino-6-promonebularine, PhCH2, 92° (decomposition), 29. An ice-cooled solution of 18 g. NaNO2 in 140 ml. H2O was
added with stirring over 20 min. to an ice cooled solution of 20 g.
2-amino-6-benzylthio-9-(\beta-D-ribofuranosyl)purine in 300 ml. HOAc, the
mixture kept 1 hr. at 0° and overnight at room temperature and evaporated in
vacuo, the residue washed 2-3 times with 50-100 ml. portions of water,
evaporated in vacuo, the residue suction filtered, the solid washed with H2O,
dissolved in MeOH, and repptd. with H2O to give 75% 6-benzythio-2-hydroxy-
9-(\beta-D-ribofuranosyl) purine (II), m. 137-9°. A solution of 15 g.
II in 200 ml. dioxane saturated with MeNH2 at 0° was heated in a glass
autoclave 6 hrs. at 60° and evaporated in vacuo and the residue treated
with activated charcoal to give 50% I (R = Me, R1 = OH), m. 185-90^{\circ}
(H2O). Similarly prepared was 33% I (R = allyl, R1 = OH), m. 220-2^{\circ}
(decomposition) (iso-PrOH). Other I (R1 = OH) were prepared from 3.9 g. II
refluxed 2-5 hrs. with an amine in 50 ml. anhydrous dioxane or iso-PrOH (R,
m.p., and % yield given): o-ClC6H4CH2, 170-2° (decomposition) (PrOH),
25; m-ClC6H4CH2, 152-5° (iso-PrOH), 39; p-ClC6H4CH2, 208-10° (decomposition), 78; p-MeOC6H4CH2, 166-8° (decomposition), 27; PhCH2,
160-2° (iso-PrOH), 37; PhCH2CH2, 159-61° (BuOH), 49; trans-2-phenylcyclopropyl, 153-6° (decomposition) (iso-PrOH), 27.5; Pr,
235-40°, 64; sec-Bu, 214-16° (decomposition) (iso-PrOH),
26°, L-PhCH2-CHMe, 148-50°, 38; D-PhCH2CHMe, 220-2°
(iso-PrOH), 23; o-MeC6H4CH2, 180-2° (decomposition) (iso-PrOH), 33; PhOCH2CH(OH)CH2, 145-7° (iso-PrOH), 32; 2-hydroxy-3-(\alpha-
naphthyloxy)-propyl, 152-4° (iso-PrOH), 21; PhCH(OH)CH2,
217-19° (iso-PrOH), 37; m-MeC6H4OCH2CH(OH)CH2, 146-9°
(iso-PrOH), 40. A solution of 5.3 g. NaNO2 in 10 ml. H2O was added with
ice-cooling to a mixture of 5.0 g. I (R = o-MeOC6H4CH2, R1 = NH2) in 50 ml.
glacial HOAc, the mixture kept overnight at room temperature and evaporated in vacuo,
the residue taken up in CHCl3-H2O, and the CHCl3 phase dried and evaporated in
vacuo to give I (R = o-MeOC6H4CH2, R1 = OH), m. 150-2° (PrOH).
Similarly prepared was I (R = PhCH2, R1 = OH), m. 159-61^{\circ} (iso-PrOH).
23541-34-6P 23558-60-3P 23558-61-4P
23558-69-2P 23558-70-5P 23558-71-6P
23558-72-7P 23559-42-4P 23559-46-8P
23559-57-1P 23559-61-7P 23559-62-8P
23605-75-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
    (preparation of)
23541-34-6 CAPLUS
Adenosine, 2-chloro-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)
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RN

23558-60-3 CAPLUS Adenosine, 2-chloro-N-[(2-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)  ${\tt CN}$ 

Absolute stereochemistry.

RN

23558-61-4 CAPLUS
Adenosine, 2-chloro-N-[(3-chlorophenyl)methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

23558-69-2 CAPLUS RN

Adenosine, N-[(2-chlorophenyl)methyl]-1,2-dihydro-2-oxo- (9CI) (CA INDEX  ${\tt CN}$ 

RN 23558-70-5 CAPLUS

CN Adenosine, N-[(3-chlorophenyl)methyl]-1,2-dihydro-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 23558-71-6 CAPLUS

CN Adenosine, N-[(4-chlorophenyl)methyl]-1,2-dihydro-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 23558-72-7 CAPLUS

CN Adenosine, 1,2-dihydro-N-[(4-methoxyphenyl)methyl]-2-oxo- (9CI) (CA INDEX

McIntosh

NAME)

Absolute stereochemistry.

23559-42-4 CAPLUS
Adenosine, 2-chloro-N-[(3,5-dimethoxyphenyl)methyl]- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

RN

23559-46-8 CAPLUS
Adenosine, 2-chloro-N-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME) CN

RN

23559-57-1 CAPLUS
Adenosine, 1,2-dihydro-N-[(2-methylphenyl)methyl]-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

23559-61-7 CAPLUS
Adenosine, 2-chloro-N-[(3-hydroxyphenyl)methyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN

23559-62-8 CAPLUS
Adenosine, 1,2-dihydro-N-[(2-methoxyphenyl)methyl]-2-oxo- (9CI) (CA INDEX CN NAME )

Absolute stereochemistry.

McIntosh

RN 23605-75-6 CAPLUS CN Adenosine, 2-chloro-N-[(4-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)